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INSIDE DOPE

by GEORGE F. TAUBENECK

Story of the Week
Silent Sufferer
Progress Endangered
Quoting Les Bower
What's the Answer?

Story of the Week

Disposal of the Army-Navy's surplus property is one of the major problems of Our Times. If this readily available stuff is funneled into the marts of civilian demand rapidly, it can head off Inflation. If it isn't, surplus property will be a millstone around the neck of future business.

The heck of it is: Army-Navy red tape won't permit that simple idea to arise above the still-birth level

However, we must give due credit to one Army Disposal Unit. This obscure division has decreed that its male and female pigeons must be segregated, henceforth.

"That's the only way we can bow out of the pigeon business gracefully," acknowledges the impatient Officer of the Day.

Silent Sufferer

John Zylstra, an old friend of ours from the Far East, has risen from the dead; and is now in these parts, reorientating himself to progress in the refrigeration industry.

When we first met the redoubtable Mr. Zylstra, he was a wealthy importer and merchandiser of refrigeration and electrical products in Malaya and the Dutch East Indies. After having lost his fortune and all his holdings almost overnight, and after having been given up for dead, rugged John is back again, starting a new life from scratch as Singapore manager for Kelvinator.

He and his family, along with all the members of his organization, were captured by the Japs. All his property was confiscated, of course. Fortunately, his family was interned in a Jap prison camp run by a decent fellow. They were not molested, nor did they starve.

John didn't starve, either, although he was subjected to beatings. Because he was a competent electrical engineer, he was taken back to Japan, where he helped operate an electrical power plant.

His friends and associates, especially those who didn't have technical skills the Japs could use, fared badly. More than 40% of his employes died or were killed in prison camps. One of his best friends, a learned jurist who had been chief justice of a supreme court, was forced to work in a coal mine where he lost his health.

Before Pearl Harbor Mr. Zylstra had accumulated quite a store of refrigeration parts and equipment in Singapore. This inventory was preempted by the Japs, of course; and for a time they attempted to operate his business. But when the Nipponese businessmen in Singapore saw the handwriting on the wall, they sold out the remainder of Mr. Zylstra's stock to local Chinese speculators, and fled.

So, after the liberation, the original owner (Mr. Zylstra) had to buy back his own equipment from the Chinese speculators at prices ranging from two to three times what he paid for it. He has put in a claim to the American government, of course; but how much he'll get, and when, is problematical.

He doesn't seem a bit discouraged, however. Happy to be alive and kicking, he's eager to start all over again and earn another fortune.

There's a MAN for you!

(Concluded on Page 13, Column 1)

Jack & Heintz Announce New Hermetic Unit

CLEVELAND — Jack & Heintz Precision Industries, Inc. last week officially heralded its entrance into the refrigeration industry with the announcement that it is making tests on a new hermetic compressor. Production is planned to get underway before the first of the year, depending on the availability of materials, it was reported.

The unit, said to be "no larger than a milk bottle" (see picture on page 4) was developed under the direction of Ralph M. Heintz, vice president in charge of engineering.

However, the company would release no design or engineering details on the unit at this time. The compressor and motor are apparently contained in an upright metal enclosure that has somewhat the appearance of a vertical liquid receiver on old models of refrigerating machines.

Compactness and reductions in weight are the principal advantages claimed for the new unit. Development is now nearing completion on units of ⅛-hp. and ⅙-hp. size, for household refrigerators. Other models are said to be under development for commercial applications.

Launderall Washer Will Sell For $272

DETROIT — Launderall, a completely automatic home laundry with which the F. L. Jacobs Co. here is bowing into the appliance field, will sell for $272 retail, according to Clyde G. Remmo, assistant sales manager of the firm's appliance division.

The machine is now being produced at the rate of 200 daily, it was reported.

Output is scheduled to reach 10,000 monthly in August and 20,000 monthly by the end of the year, barring further manufacturing difficulties, Mr. Remmo said.

Only 51 distributors will handle the Launderall, according to Mr. Remmo. He added that allocations to the approximately 5,000 franchised dealers will be based on sales potentials. Dealer sampling is scheduled for August, he said.

With the present limited production, Mr. Remmo emphasized that distribution through retailers will be selective.

Distributors will soon release a cooperative advertising plan to dealers, he stated.

The F. L. Jacobs Co. plans to await more favorable conditions before it begins production of a room heater "that heats objects not air" and a dishwasher and garbage disposal unit.

Seek Better Break For Locker Plants Under Building Restrictions

OMAHA Neb.—Asserting that food processing and preservation are being "hindered and discouraged" by the discrimination of many Civilian Production Administration district offices against locker plant building applications, two national associations in the locker plant field have asked CPA to reclassify locker establishments as processing plants under the Veteran's Housing Program building order.

Locker plants now are in the same classification as offices, banks, and stores.

The associations are the Frozen Food Locker Manufacturers and Suppliers Association and the National Frozen Food Locker Association.

(Concluded on Back Page, Column 1)

Distributor, Dealer Discount Boost May Face Delay

DETROIT—The new Price Control law says that distributors and retailers of "reconversion" products (which has been unofficially interpreted to include refrigerators, ranges, and washers) shall not have their peacetime discounts or markups reduced.

This would seem to mean that the reductions that distributors and dealers have taken in their margins (about 3% on refrigerators, 7% on electric ranges, and 9½-12% on washers) should be restored to them.

Big question right now is "how" and "when" will this be done.

Simple way would be for the OPA to issue a simple directive permitting each manufacturer to set new retail prices for his own product which would increase them by the amount that has been absorbed by distributors and dealers in the past.

However, OPA hasn't any record of doing things "the simple way" in the past, and most observers think OPA is more likely to demand that each manufacturer submit a separate schedule of prices for each appliance, and each order must then be approved separately. This would take at least three weeks, it is thought.

Some observers think that the OPA must act upon the restoration of discounts within 30 days, basing this thought on that part of the new price control law which says:

"Insofar as the provisions of this Act require the Administrator to make any change in any maximum price, such provisions shall not be deemed to require such change to be made before the 30th day following date of enactment."

Others are of the opinion that such action would come under the "new pricing regulation" and this might take up to 90 days.

Manufacturers of refrigerators and other appliances will undoubtedly seek increases in the manufacturers' prices of such items under the new provision which permits the manufacturer his 1940 price plus average industry increases in costs of producing such an item since that time.

> WASHINGTON, D. C.—What's the price status of items contracted before resumption of price control, but not delivered before the new Act became effective?
>
> That's a question bothering numerous firms throughout the country. OPA says deliveries made after the Price Agency's reinstatement will have to be paid for at re-established ceilings, regardless of conditions in the private contract. The official statement follows:
>
> "Deliveries made after resumption of price control at prices in excess of seller's ceiling price at time of delivery constitute violations."

The OPA does not have to take action on such requests until 60 days after the Industry Advisory Committee has met and submitted figures, and if it wants to hold up action beyond that time it can let the matter go to the emergency court of appeals where it must be decided in 30 days.

Thus, action on a manufacturer's request for a price increase could string out for three months after the OPA took the figures from the Industry Advisory Committee.

There is another joker in the deal. Only OPA can call a meeting of the Industry Advisory Committee on a matter involving prices. If the manufacturers held such a meeting on their own volition, they would be subject to prosecution under the antitrust laws.

Thus, further delay is likely because of the time lag that will inevitably ensue before OPA gets around to calling such meetings.

Price Control Is Lifted From Most Commercial Refrigeration Items

Whiting To Make Freezer, Machines Coldplate Liners

CHICAGO—Production of a line of home freezers, the compressors to power them, and the Larkin "Evapoliner" system of making coldplate liners are the three departments of activity through which Whiting Corp.'s home freezer division will enter the refrigeration industry, according to Howard Roberts, general sales manager of the new division.

First to be produced will be two home freezers. The smaller will have a capacity of 4½ cu. ft., or 175 lbs. of frozen food, will use only 14 oz. of "Freon-12" in contrast with requirements of the several pounds of refrigerant called for by other freezers of comparable size, and will sell for the OPA-approved price of $239.50, Mr. Roberts revealed.

The larger freezer will have a capacity of 11 cu. ft., or 475 lbs. of frozen food, and will sell for approximately $379.50. Both boxes will have white Duco enamel finish, 4 in. of Fiberglas insulation, will pull down to 0° F., and will carry a guarantee of five years.

The company is attempting no production promises until tooling has been completed and necessary raw

(Concluded on Page 17, Column 1)

York's New Plants to Quadruple Capacity

YORK, Pa.—Authorization for a building program to cost more than $1,000,000 has been granted the York Corp. here by the Civilian Production Administration.

York plans to construct two new buildings and four building extensions thus adding 113,000 sq. ft., or 10%, to its manufacturing space here, according to Stewart E. Lauer, president of the company. Some plant internal alterations are also contemplated.

The firm also plans to spend $3,000,000 on modern production tools and to completely reorganize its plant into 12 separate production areas, he added.

This program, he said, should be completed on or before Jan. 1, 1948. At that time the plant should be able

(Concluded on Page 4, Column 2)

Price Ticketing Rules Restored on Appliances

WASHINGTON, D. C.—OPA regulations on pre-ticketed commodities since the reenactment of price control requires that retailers and wholesalers of "big ticket" items such as major appliances must not disturb price tickets applied by the manufacturer. Retailers and wholesalers of small appliances, housewares, and radios were warned to make certain prices on such commodities were correct.

In Amendment 45 to SO 126 (effective July 26, 1946) OPA stated that any retailer or wholesaler of a major appliance who had removed or changed a ticket between July 1 and July 25 must not sell the item until he had received a new correct price tag from his supplier, or had himself replaced the tag he removed.

With small appliances the retailer or wholesaler must re-attach the correct, or ceiling price as of June 30, 1946, before offering any non-ticketed commodity for sale.

'Packaged' Conditioners In Larger Sizes Also Suspended From Control

WASHINGTON, D. C. — Most commercial refrigeration and air conditioning equipment and accessories were suspended from price controls by OPA July 26.

The long-awaited action was taken in Amendment 37 to Supplementary Order 129.

However, OPA kept the price lid on certain industry products. Chief among these are farm and home freezers, low temperature cabinets of various types, and condensing units of 1 hp. or less and of 25 hp. or more.

The agency warned that if prices are increased unreasonably, controls will be reinstated "promptly." It said it would "keep price movements and changes in demand or supply under continuous and careful scrutiny."

Part 8 of the amendment, dealing with mechanically operated commercial refrigeration and summer air conditioning equipment and accessories covered by Maximum Price Regulation 591 and the General Maximum Price Regulation, lists the following items as decontrolled:

"1. Air conditioning units, self-contained, over 1 hp. to 12,000 B.t.u. and up to but not including 25 hp.

"2. Beverage cooling and dispensing equipment.

"3. Coils and fan coils, except those manufactured from glass, designed for cooling purposes only.

"4. Condensing units, over 1 hp. and up to but not including 25 hp., or 25 tons.

"5. Cabinets as follows: Ice cube makers, cabinet type.

"6. Evaporative condensers.

"7. Insulated cold storage doors.

"8. Refrigerated coolers as follows: beverage coolers, water coolers, milk coolers, salad coolers.

"9. Refrigerated counters and display cases as follows: Counter and back bar refrigerators; display cases, all types.

"10. Refrigerator compressors, over 10 hp. and up to but not including 25 hp., or 25 tons.

"11. Refrigerators over 16-cu. ft. capacity, as follows: Commercial, display, reach-in, walk-in."

As a "necessary aid" in the studies to follow the suspension, OPA requires the manufacturers to file copies of all current published catalogs, price books, and discount sheets. All catalogs and price books published subsequently also must be filed.

Among the other products covered by the amendment are: specified items of hardware, screening, miscellaneous cast and sheet metal, heating and winter air conditioning, controls, valves and pipe fittings, piping accessories, and plumbing equipment. Hardware for commercial refrigerators is included.

Part 5 provides that among the items remaining subject to price control under MPR 591 of the GMPR are "Refrigeration Controls—Electric, of the following types only:

"(i) High or low side domestic refrigerator controls with an electrical rating of ½ hp. a.c., or less, and especially designed for new or replacement purposes on domestic refrigerators.

"(ii) Remote bulb or capillary tube domestic refrigerator temperature controllers, with an electrical rating of ½ hp. a.c., or less, and especially designed for domestic refrigerators."

Northern Illinois Utility Bans Gas For New Heating Units Until Next April

New Facilities May Provide Greater Supply In 1947

CHICAGO — No gas for new or additional space heating will be supplied by the Peoples Gas, Light & Coke Co. here to its subscribers in northern Illinois until April 30, 1947.

The company blamed the "impossibility of getting materials for new pipeline construction" for its action. For this reason, it said, "an additional supply of natural gas which was expected to be available this year will be delayed until next spring."

Other service companies serving northern Illinois and using the same pipeline are expected to take similar action soon. These companies are the Public Service Co. of Northern Illinois, Western United Gas & Electric Co., and Illinois Northern Utilities Co.

OVERLOADED NOW

A spokesman of the Illinois State Commerce Commission said that overloading of the pipeline was at a serious stage and would remain so until next spring when additional installations would be made by the pipe line company.

Peoples Gas, Light & Coke Co. announced its step of restricting the gas supply in a letter addressed to all gas heating equipment manufacturers, heating contractors, steamfitters, sheet metal contractors, jobbers, appliance dealers, builders, and architects.

In the letter, B. H. Wittmann, domestic sales manager, stated that amounts of gas needed for refrigeration, cooking, water heating, and for essential industrial uses had increased.

So, he said, "one direct way we can prevent further large demands on our present supply of gas during the coming winter months is to cease, for the present at least, to supply gas to any customer for new or additional space heating purposes.

EFFECT ON PRESENT USERS

"Present space heating customers are unaffected except that they cannot install additional capacity," he added.

Exceptions to the above order, effective July 11, 1946, are:

(1) Customers whose premises were heated with gas during the past winter,

(2) Customers whose gas heating equipment is used now, is installed, or in process of physical installation, and

(3) Residential customers whose use of gas for space heating will be in dwellings completed since Jan. 1, 1946, or now under construction, provided that the customer submits satisfactory evidence of eligibility on the basis of his building specifications, showing that gas is specified.

Solving Salesmen's Housing Problem With 'Luxury' Trailer

* * *

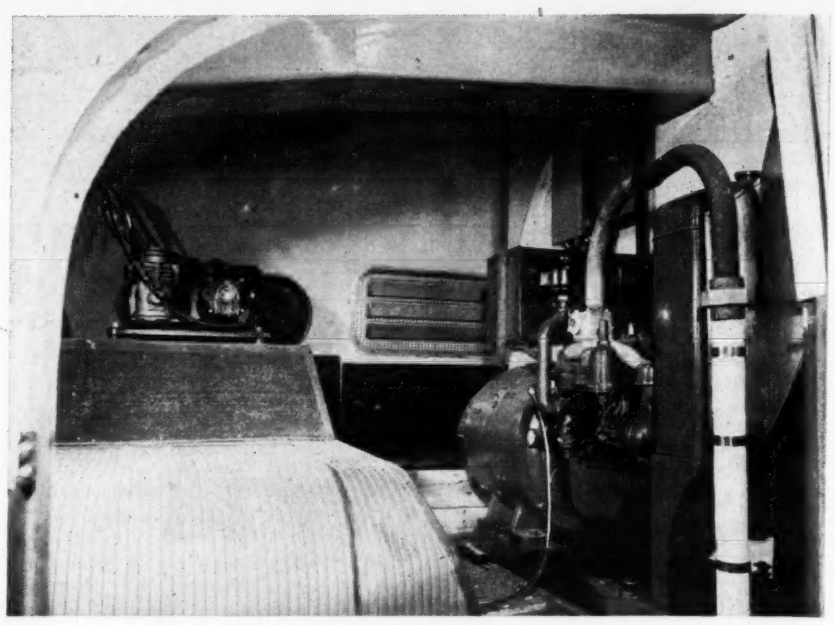
OMAHA — Solving the housing problem and providing display and office space for traveling salesmen at one and the same time, Phil Cohen, president of the Mayfair Co., wholesale hardware firm here, has designed a deluxe home on wheels complete with refrigeration and air conditioning equipment.

A four-cylinder motor generating 44 amperes and 5,000 watts of alternating current provides power for a built-in electric refrigerator and two air conditioning units (one for the driving compartment, lounge, and galley, and the other for the sleeping compartments).

Off the same motor are operated a washing machine, a radio, electric lights, three thermostatically controlled electric heaters, a four-burner electric stove, and a water pump which maintains 30 lb. pressure in a 400-gallon fresh water tank.

Mr. Cohen produced his home on wheels by purchasing a streamlined cross-country motor coach, minus interior fittings, from a Sidney, Ohio, bus manufacturer. Omaha firms outfitted the interior.

Christened the Mayfair Mainliner, the bus also contains a shower with hot and cold running water; a kitchen sink of porcelain, stainless steel, and chrome; cupboard space for dishes, cooking utensils, and non-perishable foods; a hot water tank; two septic tanks for the toilets; a drop leaf table to seat eight persons, and two office and display rooms which are converted to bedrooms at night.



One of the display rooms contains lounge seats which make up into a 6-ft. double bed with full size bath adjoining. The other has washroom facilities.

All this is contained in a living space 21 ft. long and 90 in. wide. The electric motor and the bus motor are contained in a rear compartment.

Mr. Cohen believes that he could turn out similar coaches for about $22,000 complete.

(At right) Kitchen of the "Mayfair Streamliner," showing refrigerator and range. In the back are two combination office-bedrooms, bathroom, and laundry. (Above) Machine compartment. At right is motor generating 44 amperes and 5,000 watts, to supply needed power. Compressor for refrigeration and air conditioning facilities is mounted at left.

Easily demonstrated advantages of FIBERGLAS insulation

You'll find you have a potent selling feature—a real sales clincher—when you can tell customers *"it's insulated with Fiberglas"*. For never before has any insulating material been such a standout—first choice with manufacturers, distributors, retailers and consumers alike.

High in insulating efficiency, Fiberglas is a "lifetime" insulation—won't rot—is in there for *good!* And it doesn't settle or pack down—instead, tends to expand when subjected to shocks or vibration.

Just remember these salient points about Fiberglas, then get them across with every customer. You'll find this a big help in closing sales—of ranges, refrigerators, other home equipment from water heaters to table cooking appliances.

Owens-Corning Fiberglas Corporation, Dept. 848, Toledo 1, Ohio.

In Canada, Fiberglas Canada Ltd., Toronto, Ontario.

LOOK FOR THIS SEAL!

Yes, look for this handsome yellow and blue seal on the home appliances you are selling. Used by manufacturers, these seals help you capitalize on the *sales value of Fiberglas Insulation*. Look for them . . . and use them in your selling!

OWENS-CORNING FIBERGLAS THERMAL INSULATION

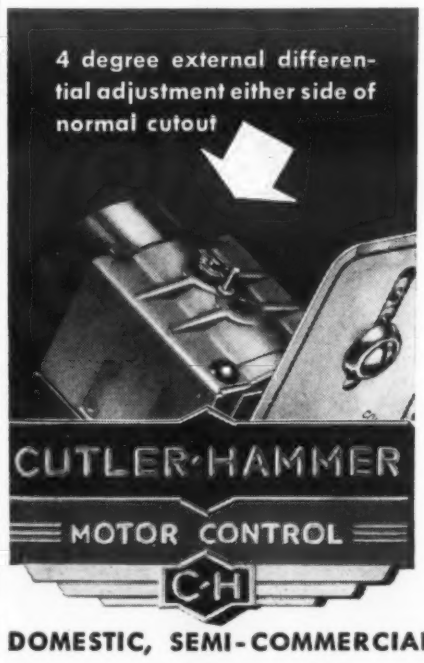
A COMPREHENSIVE LINE

Cutler-Hammer Refrigeration Replacement Control

The Cutler-Hammer line of Refrigeration Replacement Control is unusually comprehensive and complete. One unit alone, the *Universal* unit, will handle 60% of the repairman's needs. In rare cases where exact replacement control must be furnished, that item also will be found in the Cutler-Hammer line, individually packed, clearly labelled, complete with dial plate, mounting screws, trim washers and instructions for mounting, and range and differential adjustments.

The Cutler-Hammer Line of Refrigeration Replacement Controls is the product of more than 50 years of fundamental control specialization . . . another reason why outstanding refrigeration wholesalers recommend it and alert service organizations from coast to coast feature and use it. . . .

CUTLER-HAMMER, Inc., 1362 St. Paul Ave., Milwaukee 1, Wis.



This One Universal unit alone covers 60% of all needs.

Bul. 9521N9

Adjustable Mounting Brackets
Maximum Mounting Centers 4-3/16
Minimum Mounting Centers 2-3/16

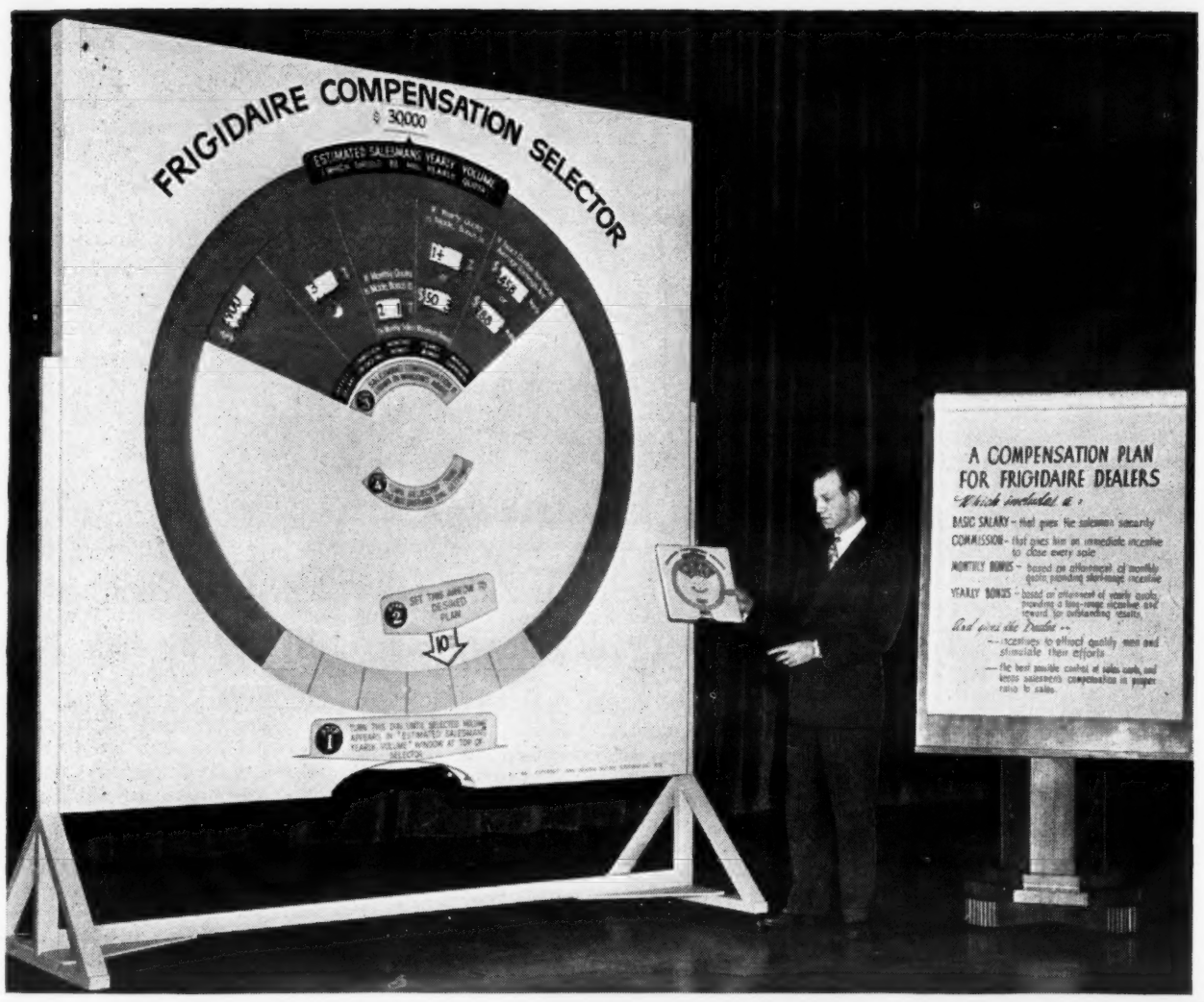
Adjustable Cutout Feature—Differential can be increased 4 degrees by turning indicator in "Hi" direction and decreased 4 degrees by turning in "Lo" direction.

Adjustable Range—Turning screw clockwise lowers settings and counter-clockwise raises settings.

Operating knob can be adjusted to meet various evaporator scale settings. New knob is ideal for varying shield thicknesses. Makes this control adaptable to wider range of single dial replacement jobs where overload is not required in unit.

DOMESTIC, SEMI-COMMERCIAL AND COMMERCIAL CONTROL

Now! Frigidaire Sets a New Pace for Hiring, Training and Compensating Salesmen!


FRIGIDAIRE COMPENSATION SELECTOR
$ 30000
ESTIMATES SALESMANS YEARLY VOLUME
$50
A COMPENSATION PLAN FOR FRIGIDAIRE DEALERS
BASIC SALARY - that gives the salesman security
COMMISSION - that gives him an immediate incentive to close every sale
MONTHLY BONUS - based on attainment of monthly goals, providing short-range incentive
YEARLY BONUS - based on attainment of yearly quota, providing a long-range incentive and reward for outstanding results.
And gives the Dealer —
— incentives to attract quality men and stimulate their efforts
— the best possible control of sales costs, and keeps salesmen's compensation in proper ratio to sales.

Compensating Salesmen. New "Frigidaire Compensation Selector" tells the dealer in seconds what the salesman will earn and what the dealer's cost will be on any number of sales, and at any percentage. Here George Plumly, of Appliance Sales Dept., uses an enlargement in explaining it to field and factory personnel.

For years, the appliance dealer's No. 1 problem has been turnover in sales personnel, a problem which has cost the dealer considerable in lost time and money. Now, Frigidaire has answered that problem with a new program for building better sales forces that "stay put" and become profitable to the dealer. For instance:—

Selecting and Hiring the Frigidaire way makes it possible to separate the better men right at the first interview.

Orientation the Frigidaire way make every salesman feel he's an important member of the selling team.

Training the Frigidaire way gives the dealer everything he needs in charts, slide films, manuals, information and instructions to help him train good salesmen to be even better.

Supervision the Frigidaire way is liked by salesmen because it makes them more productive, more profitable to themselves and the dealer.

Compensating the Frigidaire way tells the salesman, *before he starts to work,* how much he can expect to receive weekly, monthly and yearly: in salary, commission and bonus. And . . . tells the dealer what his sales cost will be on any number of sales at different rates of compensation.

So, here again, is another example of why Frigidaire is recognized as the leader. It's this everyday thinking of the welfare of Frigidaire dealers and salesmen that makes appliance people everywhere agree that you can *Depend On Frigidaire To Do Things RIGHT*

More Than 8,300 Figures are on the "Frigidaire Compensation Selector." Two men worked 500 hours and made 50,000 calculations to arrive at them. The "Frigidaire Compensation Selector," considered the most ingenious, yet simple device of its kind ever invented, was produced solely as a help for Frigidaire dealers.

Selecting Salesmen is less of a gamble when done the Frigidaire way. The guesswork is taken out of it by analysis which points up the most likely prospects.

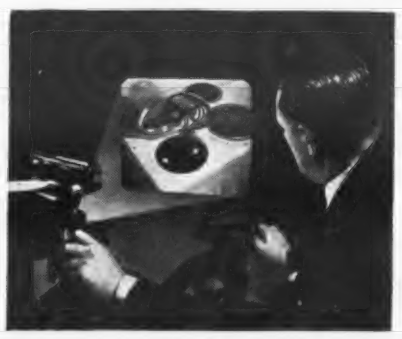
A National Survey among Frigidaire dealers brought out the facts on what makes a good salesman "good"—a poor salesman "poor." C. S. Trigg and P. J. Barnaby, Appliance and Commercial Product Promotion Mgrs., check the findings which were used as a guide in producing the new hiring and training program for Frigidaire dealers.

Frigidaire Sales Promotion puts major emphasis on informing its people. Here, L. A. Clark, Asst. General Sales Mgr., explains to factory and field personnel at a recent meeting that 78% of Frigidaire's budget is spent on training and informing activities.

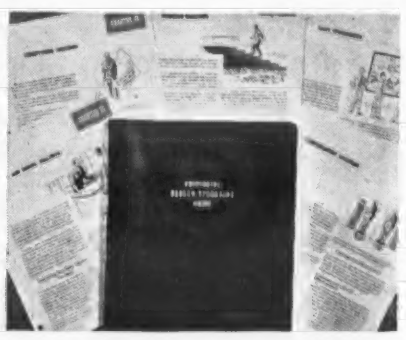
Hiring the Right Man is easier the Frigidaire way. By questions and answers, dealers select those men who have the capacity for being profitable to them.

Individual Supervision is uppermost in Frigidaire training. Dealers are shown that by this method good salesman are kept on the force.

Training Salesmen is a never-ending job with Frigidaire and its dealers. Exchange of ideas form the basis for many new selling techniques.



Visual Training is a basic procedure at Frigidaire. Here a dealer explains the dependability of Frigidaire Ranges in a manner readily understood.



The "Dealer Operating Guide" is a book of information for dealers. Information such as this gives the dealer data to assist him in running his business.

You're twice as sure with two great names

Frigidaire made only by **General Motors**

ICI Schedules Meeting For Detroit August 15

DETROIT — To acquaint the air conditioning and heating industries with the plans that have been mapped out for the Indoor Climate Institute's activities in the coming year, a special meeting has been scheduled by I.C.I. on Aug. 15 in the Italian Gardens of the Book-Cadillac hotel here.

Presidents, secretaries, managing directors, and chairmen of publicity committees of all trade associations in every branch of these industries, and representatives of trade and shelter publications, are invited to attend this meeting with the I.C.I. board of directors and staff, which will begin at 10 a.m.

At this meeting I.C.I. expects to distribute its new consumer booklet, "Look Under the Hood," which tells a non-technical story of automatically fired central heating plants.

York's New Plants to Quadruple Production--

(Concluded from Page 1, Column 4)

to turn out four times the dollar value of production per square foot attained in the best year before the the war, excluding inflation of values, he declared.

York's production employes will increase two and one-half times over the largest prewar employment record, it was estimated.

Justification for the expansion was found in a two-year long research of 86 markets. The research was conducted by a York staff assisted by four outside survey agencies, Mr. Lauer said.

Many new tools already have been delivered, others are in process of construction, and many are being ordered as fast as new products are field proven, Mr. Lauer stated.

According to the plant rearrangement plan, 11 of the 12 areas will each turn out standard products complete, including all fabrication and assembly operations. Each area will have its own store room for finished parts and purchased items, strategically located for the minimum of material handling. Except for plate-type exchangers and small refrigerant fittings, all production will be on first floor level, and in most areas on a two-shift basis.

In the Grantley division of the plant, all manufacture, including the foundry, will be on a straight-line production basis. Here all standard products of the pre-engineered or package type for consumer or semi-consumer use will be made. This includes everything up to 5-hp. capacity.

All standard products above 5-hp. capacity and standard tubular heat exchanger equipment will be made in the West York division.

The twelfth area will be used for shop maintenance and service departments and for the manufacture of all repairs for old style equipment.

Tooling will be retained here for production of heavy-duty, old-style machines for certain domestic and export customers.

All other types of "Custom" items will be designed and built in York district shops or subcontracted to other companies.

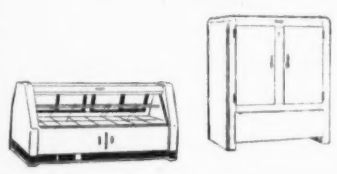
These plans for standardized production should bring more regular work and steadier incomes to the company's employes, declared Mr. Lauer.

He added that the time element in the schedule is based on an easing of materials procurement within the next few months.

Here's Size of New Jack & Heintz Unit

"No bigger than a milk bottle" is the claim made for the new hermetic refrigeration compressor which will be produced by Jack & Heintz, Cleveland. (See story on page 1.) Mary Dublin here holds the compressor in her left hand. Engineering details on the unit will be made public later.

FALL IN LINE WITH FOGEL



JOIN OUR HUNDREDS OF SUCCESSFUL DISTRIBUTORS

SELL OUR COMPLETE TOP-QUALITY LINE

INTERESTING PROPOSITION TO QUALIFIED DISTRIBUTORS

A FEW TERRITORIES STILL AVAILABLE. *WRITE TODAY!*

FOGEL · REFRIGERATOR COMPANY · Since 1899
5400 Eadom St., Philadelphia 37, Pa.

OPA Industry Advisory Committees Reinstated

WASHINGTON, D. C.—The 685 OPA Industry Advisory Committees which ceased operation on June 30 are automatically reinstated under the terms of the Price Control Extension Act of 1946. These groups will continue to advise and consult with the Price Administrator on issues affecting their industries.

Scrap Shortage Threatens Steel Mill Production

NEW YORK CITY—Resistance by steel mill operators to higher prices asked by steel scrap suppliers is a main factor in the present severe shortage of that material at the mill.

As a result, the mills are scraping along on a day to day basis at a time when they would normally be accumulating stockpiles for the winter. Receipts are barely 50% of normal. Steel scrap makes up 40% of the material going into new steel.

With OPA revived, there are hopes that scrap collections and deliveries will rise.

550,000 Common Shares Offered by Jack & Heintz

CLEVELAND — Jack & Heintz Precision Industries, Inc., which is now getting into production on refrigeration compressors in addition to other products, announces a public offering of 550,000 shares of common stock at $17 a share.

Funds provided by the sale will be used, along with working capital, to purchase jigs, dies, fixtures, and other equipment and to cover the cost of plant rearrangement. The company's outstanding capitalization will include 69,772 shares of cumulative preferred stock, 4% series par $5, and 850,000 shares of common stock when this financing is completed.

Unfilled orders on May 1 were said to total $29,150,000. Production plans call for the manufacture of precision products for the aircraft industry and also other types of industrial equipment such as automotive engines, ball-bearings, and electronic measuring devices.

The stock is being offered by an underwriting group headed by Blyth & Co., Inc.

American Stove Shows First Postwar Profit

ST. LOUIS — For the first time since V-J Day the American Stove Co. quarterly report shows a profit. Company officials stated that although sales are not matching wartime peaks, the volume has been rising and now surpasses prewar levels.

Results for the second quarter of 1946 are said to have covered by a comfortable margin a dividend payment of 60 cents a share for the first half.

EXCELLENT OPPORTUNITY

for

DESIGN ENGINEER—

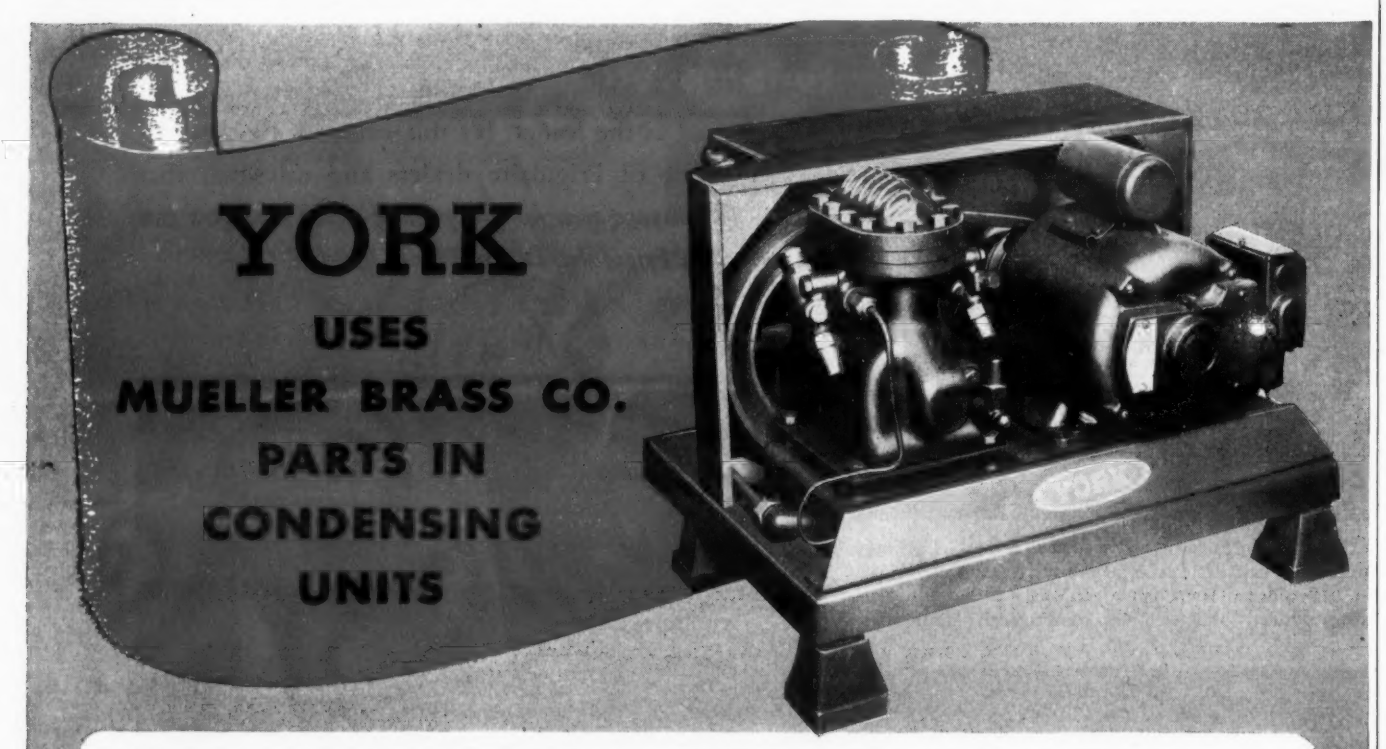
Reciprocating refrigeration compressors.

UNIT ENGINEER—

Self-contained refrigeration units.

Address all replies to:

D. S. Pond, Carrier Corp., Syracuse 1, N. Y.

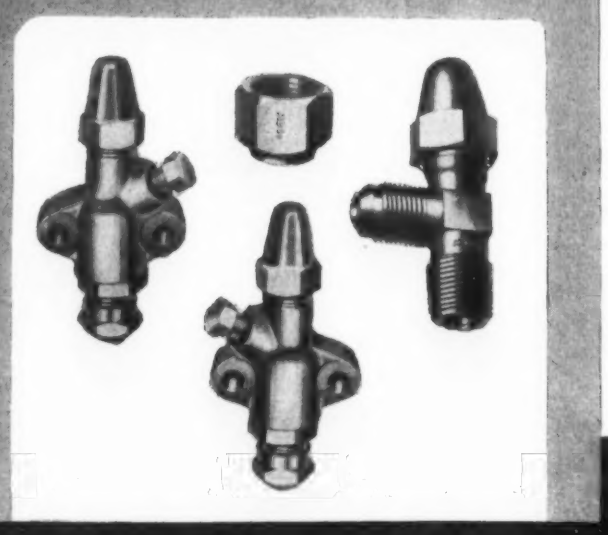


YORK CORPORATION—YORK, PENNSYLVANIA

● York "Freon-12" condensing units stand out as standard in the refrigeration industry because of certain built-in qualities of excellence. This art of building to meet the exacting demands of industry was not learned in a day—it was acquired only by systematic and cumulative progress . . . design . . . research and development.

Compressor crankcase and cylinders are cast integrally from electric furnace nickel iron, having uniform high tensile strength and hardness...crankshaft is of special high grade die forging steel, hardened and micro-ground, force-feed lubricated. Other parts made of finest quality materials and York precision manufacture assure lifelong economy and dependable performance.

THESE PRODUCTS MUST BE GOOD!

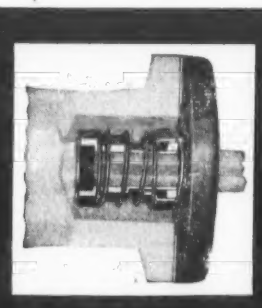


BUILT-IN QUALITY . . .

TIME-TESTED PERFORMANCE

Mueller Brass Co. Valves, Fittings and Accessories for mechanical refrigeration have a well-earned reputation for built-in quality and time-tested performance. They are manufactured specifically for mechanical refrigeration work. THEY ARE USED BY ALL OF THE LARGEST MANUFACTURERS THROUGHOUT THE UNITED STATES. Mueller Brass Co. products must be good!

MUELLER BRASS CO.
PORT HURON, MICHIGAN



ROTARY SEAL REPLACEMENT UNITS *for* Refrigerator Compressors

Are simple in construction, installation, and operation.

They are built upon the principle uppermost in the minds of all engineers—

"The Fewer the Working Parts —The Less Danger Of Trouble"

ROTARY SEAL COMPANY
2020 N. LARRABEE ST., CHICAGO 14, ILL.
Canadian Office: 382 Victoria Ave., Montreal 6, Canada

Michigan Dealer Finds Market For 1,812-ft. Coolers Designed For Army

By John Sweet

ANN ARBOR, Mich.—Believed to be the first of their kind ever offered to the public, several 1,812-cu. ft. warehouse coolers of a type used in the tropics by the military are now being installed around Michigan by White-Stuber Co., General Electric dealer here.

As the result of newspaper advertisements, inquiries have been pouring into the firm's office from as far away as Kansas City, according to L. J. White, manager and partner.

The heavy-duty, steel coolers are said to maintain a temperature of 0° F. when the outside temperature is 110°. They were designed to withstand an average relative humidity of 75%.

The coolers are part of a quantity produced by a well-known commercial refrigerator manufacturer after its Government contract was cancelled at the close of the war. Because insufficient reconversion materials were then available for peacetime production, the manufacturer continued to make the coolers.

During the war, the coolers were shipped to islands of the Pacific where the normal temperature is 120°. Inside temperature was pulled down to 8° in a few hours, it is claimed.

Overall dimensions are given as follows: length, 24 ft. 4 in.; width, 12 ft. 10 in.; height, 7 ft. 5¾ in. Approximate weight, uncrated, is 10,000 lbs.

Other specifications include: 18-gauge cold rolled steel O. S. wall; 20-gauge galvanized iron interior; 30-50-30 waterproof paper under metal; 5⅝-in. thick Fiberglas insulation. The door section can be located at any place in either side or end.

The coolers are said to be adaptable to a variety of uses, including frozen food storage, frozen food locker plant or branch plant, fox or mink farm freezing and storage, wholesale beer storage, and wholesale or retail produce storage.

They will handle 136 lockers, it is stated.

Appliance Makers Told To Expect Steel Cut

PITTSBURGH — An indication as to the extent of the shortage in steel sheeting, a vital component in the manufacture of refrigerators, washing machines, and ranges, came out of the activities of two steel firms here recently.

In order to obtain any sheeting whatever, a large manufacturer of home appliances had to sign a five-year agreement with one steel firm. Even then the appliance maker was assured of only part of his order for the fourth quarter.

Another steel company notified a household appliance firm that it controls not to expect more than half of its fourth quarter needs in sheeting.

Wyoming Cannery Starts Freezing Peas, Beans

COWLEY, Wyo.—The Big Horn Canning Co. here this season has added frozen foods to its production line, and in July frozen peas reached a pack of 50,000 12 oz. cartons per day.

The bean harvest which is just starting will continue into September and present indications are that 350 tons of beans will be processed this season. The quick-freezing operation is a new industry for the Big Horn basin territory of Wyoming.

Hussmann-Ligonier Restores 25-cent Quarterly Dividend

ST. LOUIS — Hussmann-Ligonier Co. will pay a quarterly dividend of 25 cents and an extra of 20 cents on common stock Aug. 1, the company has announced. This is the first 25 cent quarterly dividend since August, 1940, when payment was reduced to 15 cents, the company declared.

Worthington Profits Drop $1,000,000 Below '45

HARRISON, N. J.—Strikes that prevented operations in three plants for practically the entire first quarter were cited by Worthington Pump & Machinery Corp. as a factor in the sharp drop in net profits for the corporation and its domestic subsidiaries for the first six months of 1946.

The company reported a net profit of $256,680 as compared to the $1,466,995 made in the same period last year. This year's figure equalled $1.81 per share on 141,548 shares of combined preferred stocks as compared to $10.36 a share in 1945.

For the March quarter of this year, the company reported a net loss of $1,550,540, without giving effect to any tax carryback refund. This compared with a $648,194 profit for the same period last year.

Jordon Offers Dealers Free Advertising Mat Service

PHILADELPHIA — A free newspaper advertising mat service for its dealers has been inaugurated by the Jordon Refrigerator Co. here.

Mats in the first lot of seven published by the company describe units for both normal and low temperature refrigeration. The advertisements vary from one to three columns in width and range from 10 to 36 column inches in size. They contain both illustrations and copy, it is reported.

Cheyenne Pet Shop Sells Frozen Meat for Dogs

CHEYENNE, Wyo.—The Friendly Flower & Pet Shop here is working up a flourishing business with dog owners, selling frozen meat for dogs. A low temperature cabinet is used to store the meat.

Now Ready..... THIS

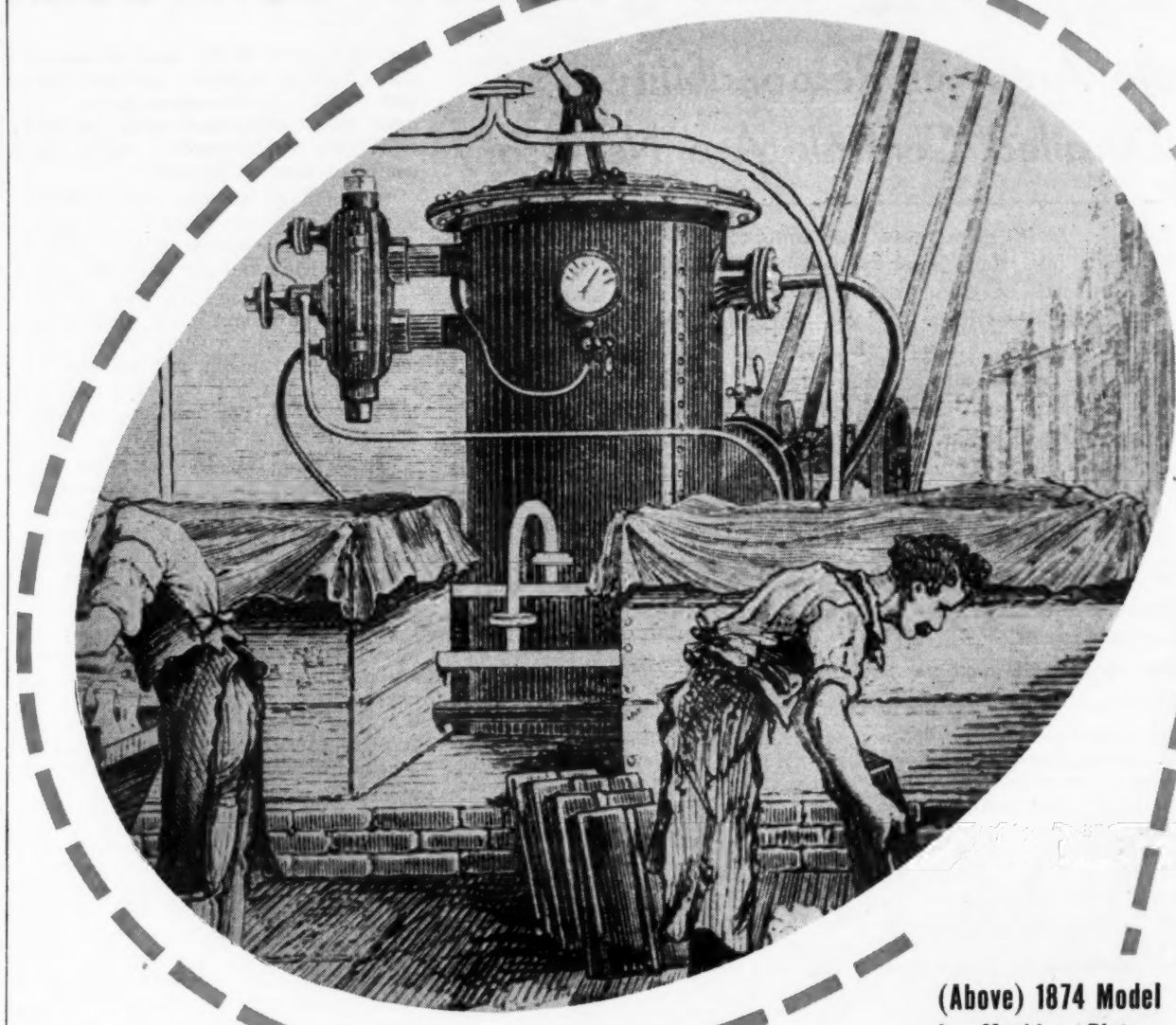
SENSATIONAL NEW DEVELOPMENT!

FREEZRLARM

Here's a NEW, effective way to render real SERVICE to every customer. FREEZRLARM is the exclusive, self-contained warning signal which sounds an alarm whenever temperature rises, from ANY cause. Not connected in ANY way with electrical system. EVERY OWNER OF FREEZER OR LOCKER PLANT NEEDS ONE. Write today for our liberal dealer proposition.

FREEZRLARM COMPANY

832 S. LUDLOW ST., DAYTON 2, OHIO



(Above) 1874 Model Ice Machine. Picture from Bettmann Archive

1874 MIRACLE!

Machine-made ice was a miracle in 1874. The cut (above) shows a typical ice plant of those pioneer days. Note the size of the machine as compared with the small capacity of the ice cans.

For further comparison, shown below is the advanced Baker 4-cylinder compressor. This compact, high efficiency compressor is evidence of very real progress.

Yet even this modern machine will soon be outmoded. As you read this, Baker engineers are designing machines of even greater efficiency. Watch Baker for progress.

Baker

ICE MACHINE CO., INC. OMAHA

MANUFACTURERS OF REFRIGERATION AND AIR CONDITIONING EQUIPMENT SINCE 1905

How a Big Refrigeration Contracting Company Operates:

Definite Areas of Responsibility And Detailed Controls Are Necessary

Editor's Note: Refrigerating contracting companies may vary in size, but their successful operation follows a pretty consistent pattern. A big company employs more men and covers more territory, but it's business formula stays the same: Efficient service plus economical operation equals profits.

But there *is* one major difference: A big company breaks its operations down into more detail, and exercises more watchful control over them, than a small outfit. It has to; the bigger the company, the more places there are for profits to get lost.

This is a picture of one of Detroit's biggest and most active firms in the field, Johnston Refrigeration Construction—how it handles requests for servicing, how it assigns its men and controls their activities, the forms it uses and how it uses them, its shop procedure, and how all these are tied into a continuous, synchronized operation.

The story will come to you in three parts. This is part I.

DETROIT—This is the story of a business, a refrigeration contractor's business, and a successful one. The company is only eight years old; it started out in 1938, on a shoestring. Today it grosses maybe half a million dollars a year, employs 65 men, and runs like well oiled machinery.

The way it runs, how it operates, is what we're interested in. But, strictly for background, here's how it happened:

It was still depression in Detroit in 1937. Many companies were still letting men go; Kelvinator was one of them. Among the last to go was their foreman in charge of installations, George L. Johnston, a veteran of 11 years' service with the company. He had joined Kelvinator in 1926, driving a parts delivery truck. At that time he had just turned 21.

Now, 11 years later, this was the only trade he knew. With nobody doing any hiring, there seemed to be only one thing to do: start a repair outlet of his own.

There were a few handicaps to be faced: He had a family to feed; he had a car, but he was still paying for it; and he would need to rent a place, put in a phone, and get himself a line of Kelvinator parts. To meet these immediate needs he had no income and, in reserve capital, the complete sum of nothing.

"We had to borrow even to eat," as he puts it now. And yet he managed to borrow enough more—$700—to set up shop and get under way.

The big opening day was Jan. 1, 1938. There wasn't much to open up. His location was a small hole in the wall at 6219 Lincoln, just big enough for a phone, a few bins and shelves made out of packing crates, and enough parts to get by with.

Those first few months were the tough ones. It takes a lot of work to build up a business, even when you've got a little dough for margin; it's a lot harder when you haven't got even that. It meant virtually working the clock around.

His wife worked with him, taking phone calls, figuring out his routes, and when the calls came in steadily as the weather got warmer, driving him from one job to another while he tried to catch up on his sleep in the seat beside her. They refused no calls they could possibly cover, anywhere in the city, day or night.

By late Spring there was enough business for him to add another service man, and they divided the city into two territories. By the end of the summer there were three men working for him. It was still a call business, though; setting up a regular shop for repairs was still a long way ahead. He had to farm out his motor repairs to one shop he knew, and send the compressors to another.

But by the end of the year Johnston Refrigeration Construction was on its feet. Two years later, in 1941, the company was made an authorized Kelvinator agency, covering repairs of all Kelvinator and Leonard household refrigerators, and all commercial jobs up to ½ hp.

He added General Electric's commercial contract in 1944, with the sales and maintenance of all G-E units up to 75 hp. The contract for Admiral service, together with the Stewart-Warner maintenance agreement that Admiral assumed, followed this year.

So much for past history.

The company's servicing picture today includes 47 repairmen and 18 others who are supervisors or part of the office staff. In outline the organization looks something like the diagram you see on this page.

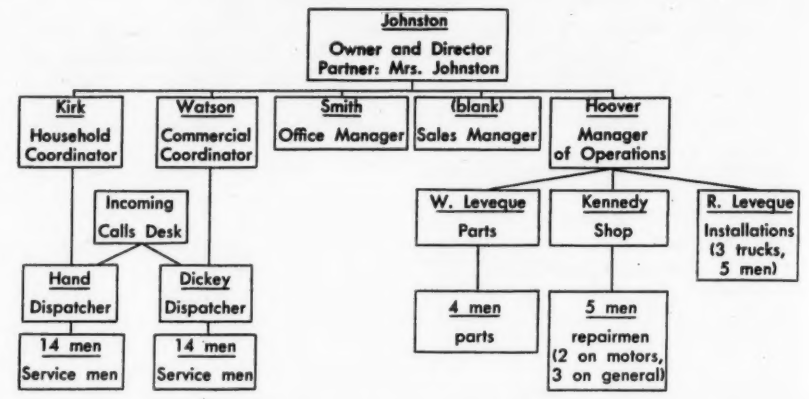
A service call coming in over the telephone is routed by the switchboard to the call desk, translated onto paper with its past history if it has any as far as the company is concerned, and given to the dispatcher (household or commercial) for assignment to a service man.

The service man's finished report, next morning or as soon after as the job is completed, goes in turn to the parts foreman, to the dispatcher, to the coordinator who heads the department, to the office manager, and finally into the reference file.

Motor and compressor repair jobs come into the shop and go through a regular channel of operations. Hermetically sealed units go back to the factory for repairs. Installations are handled by a separate department that works with the shop and the commercial servicing end.

That is the general picture, in simple outline. The details of the picture, how each department does its job, is a long story.

The Company Organization



This is a breakdown of the company's service personnel. Incoming calls go to the call desk, they are checked against information in the lookup file and go to the dispatcher, who assigns them. The dispatcher gets the service man's report (invoice) on the finished job, it is cleared through the coordinator, and final billing finishes it.

The shop handles units that can't be fixed on the job. Parts serves both these departments. Installations follow through from shop or sales orders. The number of men actively in service operations adds up to 54.

INCOMING CALLS DESK

Six trunk lines lead into the incoming calls desk from the main switchboard. With two people on the desk—Miss LaChance, and Bill Goodwin, a returned veteran—that means each can hold two incoming calls while talking to a third.

All requests for service, whether household or commercial, go through this desk. A printed call slip is used to take down the information the firm needs. The customer is asked

(Continued on next page)

Incoming Call Slip Gets the Information

INST. DATE	DATE		NO.	
ADDRESS			TELE.	
USER NAME				
CHG. TO			TELE.	
ADDRESS			TERMS	
COMPLAINT				
DEALER		SER. MAN		
CAB. MOD.	4 YR. GUAR.	Y.M.C.	1 YR. GUAR.	RS
SER. NO.	COM'L	APT.	DOM.	

JOHNSTON REFRIGERATION CONSTRUCTION — DETROIT 2, MICH.

* * *

Phone calls for service are taken down on these condensed forms. "Date" will be the day the call is received. "Address" will include the user's postal zone, since all household repair calls are assigned according to those boundries. "Tele." is needed because the dispatcher will call the customer back, just before the service man leaves for that job, to be sure somebody will be there to let him in.

Under "Complaint" will be listed all the information about the refrigerator that the caller can supply over the phone: the model, the year, the make, and what generally seems to be wrong. "Chg. to," with its address and phone followup, is the last piece of information asked for. If anybody else but the user is going to have to pay the bill, that person is called for an OK before the service man starts out.

"Inst. date" (upper left) gets its information from the lookup file, in which all past job invoices are filed alphabetically by street number. This date, and almost all the items below the double line, can be filled in only if Johnston Refrigeration Construction installed the unit, or has serviced it at one time or another. If it did, certain guarantees are liable to be in effect. The boxes below the double line will be marked to show which guarantees are still running, and the lookup girl writes the details on the back. "Terms" will be either COD (cash) or NC (no charge). The lookup file will tell why it's NC, if that's the verdict, and the details filled in on the back of the slip.

"No." (upper right) and "Ser. man" (just below the double line) are filled in last of all, by the dispatcher as he assigns the call. The number he stamps on the call slip, and relays to the service man over the phone, will be the number carried by that job from then on. It will appear on every form used for the job before it is done. Size of the slip: approximately 4¼ x 5½ in.

Specify CHICAGO
SHAFT SEALS VALVE PLATES

With Self-Adjusting Sleevelock.

Only Chicago valve plates have replaceable seats.

MODERN DESIGN

CHICAGO SEAL CO.
20 NORTH WACKER DRIVE • CHICAGO 6, ILL.

WALK-IN COOLERS · · STORAGE ROOMS
For the Trade.
Prompt Shipment of Stock Sizes.
5x7x8 • 6x8x8 • 8x10x8 • 10x12x8
Other sizes custom built promptly from seasoned material on hand.
Write for specifications and prices
MOTOR RADIO & EQUIPMENT COMPANY
2440 Charlotte St. Kansas City, Mo.

"NO CONTACT MAINTENANCE"
on Bulletin 709
Solenoid Starters

Bulletin 709, Size 2, across-the-line solenoid starter for squirrel-cage motors.

Believe it or not, the patented, double break, silver alloy contacts on Allen-Bradley solenoid starters never need cleaning, filing, or dressing. Add to this the simple, trouble-free solenoid mechanism that is good for millions of operations and it's easy to see why these starters are a favorite in the air-conditioning and refrigeration field. Available in ratings up to 100 hp, 220 v; 200 hp, 440-550-600 v.

ALLEN-BRADLEY CO.
1313 S. First St., Milwaukee 4, Wis.

Bulletin 709, Size 2, solenoid starter, installed in a Carrier air-conditioning unit.

ALLEN-BRADLEY
SOLENOID MOTOR CONTROL
QUALITY

TRACE
REFRIGERANT LEAK DETECTOR

THAWZONE
PATENTED
The PIONEER FLUID DEHYDRANT

TRACE . . .
. . . . . ITS STABLE VIVID COLOR REVEALS LEAKS INSTANTLY.

THAWZONE . . .
. . . ACTIVE, CIRCULATING . . . DESTROYS MOISTURE CHEMICALLY, ECONOMICALLY, EFFECTIVELY.

HIGHSIDE CHEMICALS CO. 195 VERONA AVE. NEWARK 4, N. J.

How Service Calls Are Handled, Dispatched

(Continued from preceding page)

for name, address, and postal zone (if her street is one they don't know, then what major artery is it near?), and telephone number.

The customer also is asked something about the job itself: Is it a private home, an apartment, a store, or a plant? Calls to private homes usually are cash, since few home owners establish charge accounts. But landlords of private homes or of apartment houses sometimes are the ones to bill, not the tenant. In such a case, the landlord is called first, and asked for his OK to go ahead before the service man starts out.

The customer is told about how long it will be before he or she can be taken care of, and if it's going to be any length of time the company calls her just before the service man starts on her call, to be sure that somebody will be there.

This is as far as the incoming calls desk takes it. The slip is dropped into the lookup box.

Of the four invoice copies filled out on every job, one copy ends in the lookup file, entered alphabetically according to street address. The lookup girl, Miss Smith, takes every incoming call slip and fills in whatever additional information previous invoices will show.

If the company has never had any contact with this customer before, there's nothing to add. But usually it has. The information she fills in can add up to the following total:

1. Was the unit installed by Johnston Refrigeration within the past year? If it was, then a number of guarantees may be in force. If it was a new unit, the hermetically sealed motor is good for five years; the cabinet itself for one year.

If the motor has been rebuilt by the company within the past year, that's still under guarantee. Replaced parts are guaranteed for 90 days, labor for 30 days. Any repairs made while any of these guarantees is still in force, are free.

2. Has the unit been recently serviced by the company? If it has, the RS box is checked on the slip, and any repairs that were done are filled in on the other side of the slip. The coordinator, as part of his job, goes into all repairs that cost the company money—in other words, wherever repairs have to be made under a guarantee that's still in effect. It shouldn't happen, if the job was done right, and he wants to know why.

3. Will the call be COD or NC (no charge)? If it's going to be a cash deal, nothing more than that has to be indicated. But if it's going to be NC, the reason is checked. Along the bottom of the slip is a row of boxes covering the possible reasons: YMC (yearly maintenance contract); or 4 YR. GUAR. (meaning those four years over and above the first year during which *everything* in a new installation is guaranteed); or 1 YR. GUAR.; or RS (when whatever *seems* to be wrong, from the customer's description, probably will fall within one of the company's warranties on its own parts and workmanship.

4. What dealer was the unit bought from, and what is its year and model? These items are filled in for the heavy jobs—commercial or industrial—that the company has installed or serviced before. They come into the picture not only because of guarantee possibilities, but because this information can simplify the repairman's procedure on special equipment he may need.

There are a few parts not included in each man's regular car stock because they're seldom called for—gaskets, door handles, and the like. If the job happens to call for one of these, knowing about it beforehand can save him a trip.

5. What is the unit's serial number? This may be important where the apartment house has one of the older multiple systems.

Suppose a call has been made to that apartment recently. One of the units in the series was repaired. If this is the same unit that was fixed before, it's probably going to come under some guarantee. But if it's a different unit in the series, that's a different story. It's treated as an entirely separate job.

Having the serial number of the unit that needs fixing clears up any possible confusion here.

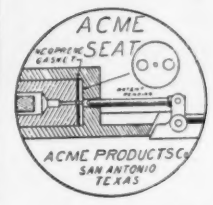
Such an apartment system is called a commercial job, as far as Johnston Refrigeration is concerned. Whenever three or more individual refrigerators are powered off the same system, the commercial side of the firm handles it.

If it's a flat with two boxes powered by one unit, or if it's an apartment where each refrigerator is self-contained—as almost all of the newer ones are—it's considered a household job. The old setup proved to be too dangerous, and too expensive, for the apartment house owners. A gas leak in the major lines, or a breakdown there, was liable to affect the system in every apartment in the house.

All of this information is checked, and entered on the incoming call slip, before it is handed to the household or commercial dispatcher.

SERVICE MEN: Don't Bother to Reface Frigidaire L/S Floats. USE ACME REPLACEMENT SEATS.

See or write



McCombs Refrigeration Supply, Denver.

Refrigeration Service Inc., Los Angeles.

Refrigerative Supply, Seattle—Portland.

ACME PRODUCTS CO.
P. O. Box 1956, San Antonio, Texas.

SUPERIOR VALVE & FITTINGS COMPANY
Pittsburgh 26, Pennsylvania

VALVES, FITTINGS & ACCESSORIES
For All
• Refrigeration
and
• Air Conditioning Systems

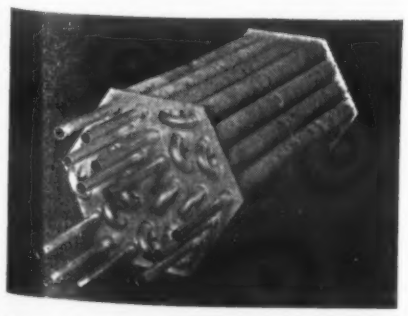
WANTED

designer - stylist

MICHIGAN manufacturer of major home appliances, including electric refrigerators, offers permanent position to product designer. Man selected must have had successful experience working with sheet metals. Please write complete details, including past and present connections, age, education and salary requirements. Photos of products would be helpful.

Box 2037, Air Conditioning & Refrigeration News

ROME-CONDENSER
★ Jointless Type ★



Rome Water Cooled Condenser Coils insure trouble-free condensing equipment. Used by leading compressor manufacturers.

ROME-TURNEY RADIATOR COMPANY
222 CANAL ST.
ROME, N. Y.

CHOICE OF EXPERIENCED *Refrigeration Men* EVERYWHERE

"DETROIT" EXPANSION VALVES

Satisfactory, trouble-free service which "Detroit" Refrigeration Valves have given throughout the industry—in the widest range of installations—have brought them to the highest standing in the minds of experienced refrigeration men.

They know that "Detroit" Valves will do the job and assure the success of the installation.

"DETROIT" DURA-FRAM EXPANSION VALVES

These valves offer a combination of features not to be found in other makes of valves, and which are of extreme value in efficient, satisfactory refrigeration.

GAS CHARGED POWER ELEMENTS prevent motor overload — have maximum sensitivity—provide quicker balancing of system with no flood-backs and no lag in pull down. Power elements are charged with a fixed, carefully controlled amount of gas. As a result, the valve remains closed until suction pressure is reduced to a predetermined value. Then the valve opens and keeps the coil working at maximum efficiency. Gas charging is an important "Detroit" feature.

COMPLETE LINE includes automatic and thermostatic valves, adjustable and non-adjustable types—capacities up to 20 tons of Freon.

SINGLE DIAPHRAGM CONSTRUCTION making valve smaller, more compact.

SPECIAL ALLOY DIAPHRAGMS amazingly durable, reliable and uniform in operation.

DELUBALOY NEEDLES AND SEATS—Years of constant service have proved reliability, durability, and corrosion resistance.

SPECIAL BODY CONSTRUCTION long tested and highly satisfactory. Power element joints are silver brazed, preventing refrigerant loss under any contingency.

PRE-COOLED HIGH SIDE LIQUID—In larger sizes, liquid is pre-cooled before reaching orifice. This reduces the volume of entrained gas and produces a denser stream through the orifice with improved balance in the system.

FLEXIBILITY—Capacities of larger valves easily changed in the field merely by changing selective capacitors or seat assembly.

NOMINAL CAPACITIES—½ to 20 tons Freon 12 or Sulphur Dioxide; .9 to 36 tons Methyl Chloride.

1784

Adjustable type; rated at ½ ton on Freon 12, .9 ton on Methyl Chloride. Inlet ¼" or ⅜" SAE (to accommodate ⅜" or ¼" reducing nut). Outlet ¼" female IPT, ⅜" or ½" SAE. Regularly supplied with strainer at inlet.

Capacity 1.6 to 6 tons on Freon 12, 3 to 11 tons Methyl Chloride. Has external equalizer and forged union connections. Inlet and outlet ⅜", ½" and ⅝" O.D. tubing. Flared nut for ¼" tubing equalizer.

No. 788 is rated 12 to 20 tons—No. 787, 6 to 11 tons and No. 786, 3 to 6 tons on Freon 12. Has external equalizer connections, can be furnished with No. 790 distributor with 6, 12, or 18 openings (¼" each).

DETROIT LUBRICATOR COMPANY *General Offices:* 5900 TRUMBULL AVENUE DETROIT 8, MICHIGAN
Division of AMERICAN RADIATOR & Standard Sanitary CORPORATION
Canadian Representatives: Railway and Engineering Specialties Limited, Montreal, Toronto, Winnipeg

"DETROIT"

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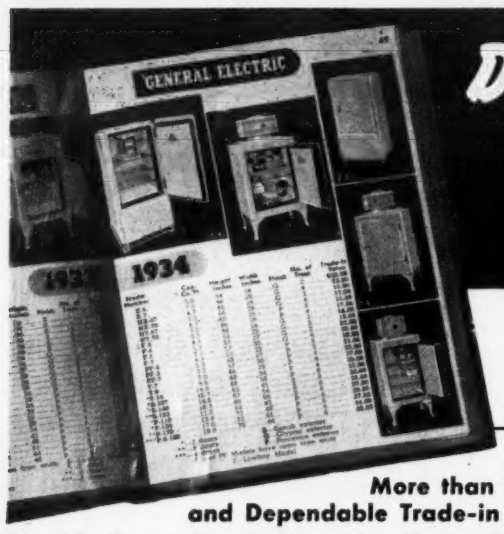

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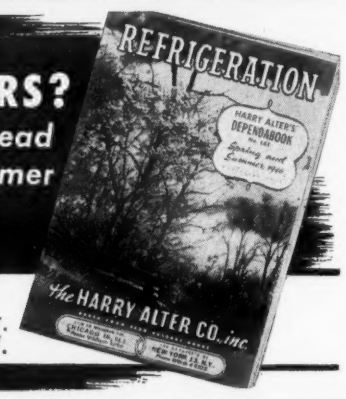

THE HARRY ALTER CO.

1728 SO. MICHIGAN AVE. CHICAGO 16, ILL. — *Two Big Warehouses To Serve You* — 134 LAFAYETTE ST. NEW YORK 13, N.Y.

Furniture Dealers Urged To Give Vets Priority

CHICAGO — Registering veterans on "home needs" lists, with or without a deposit, to give them purchasing preference on appliances and furniture in stock or in shipment from factories was proposed to the 8,000 members of the National Retail Furniture Association by the organization's executive vice president Roscoe R. Rau.

This plan would put veterans ahead of the huge backlog of normal civilian needs amounting to $1,700,000,000, according to Mr. Rau. He estimates that there are 4,000,000 newly married ex-service men and women in the country.

To get on the list, Mr. Rau proposed that the veteran must identify himself and furnish evidence of having secured priority housing accommodations.

"Delivery of goods would be made," Mr. Rau said, "according to the order in which veterans register. When the goods arrive, the veteran customers are notified. Regular customers would be given the opportunity to buy this merchandise only after veterans indicated that they were no longer interested in immediate delivery, or when they failed to complete any deposits required for down payment."

Mr. Rau explained that the small deposit feature is important to retailers because they have learned that veterans, too, are on waiting lists of several stores.

"That fact, however, doesn't affect the retailer's obligation to give preference to veterans," he declared.

Advertisement Explains Delivery Bottleneck

Hey! where's mine?
Take it Easy, Lady . . .
DELIVERIES FROM MANUFACTURERS are still limited; quantities too small to take care of everyone. FACTORIES are still trying to reach volume production. Delivery of NATIONALLY KNOWN AND ACCEPTABLE PRODUCTS cannot be safely promised to everyone who is prepared to buy.
So, Dear Lady:
1. DON'T place an order with more than one store.
2. DO register your wants with your favorite dealer and ask him to advise you when he can fill your order.
3. DON'T build your plans on vague promises given lightly by well-intentioned, but misguided persons.
4. IF you want to discuss your needs with someone, come in and see us—but please do not telephone.
Sincerely,
May-Stern's
FIFTH and ELM
MAY STERNS 62nd YEAR

Here's how May-Stern's, Cincinnati department store adapted an advertisement to explain the current bottleneck in deliveries to its customers. To the head "Hey! Where's Mine?" and the art work, both originated by Spear & Co. of Pittsburgh, May-Stern's added an explanation of why it's hard to obtain appliances and how customers can most conveniently assure themselves of getting an appliance.

Shortages, Lack of Experience Cause Host Of Ex-GI Appliance Firms to Close Down

CHICAGO — GI appliance firms started since the war are finding the going mighty rough. And from all indications things aren't expected to ease up in the next few months.

That's what members of the National Small Business Men's Association have found the situation to be in the field of appliance retailing these days. It was reported at a convention attended here recently by some 500 small businessmen from every part of the United States.

One of the primary causes of the headaches besetting veterans in the appliance field is the shortage of merchandise. It was pointed out that the slowness with which goods are coming through has already throttled many a GI firm new to the business.

L. M. Evans, partner in a wholesale electrical appliance distributorship covering 20 counties in northern Ohio, told of losses in his territory:

"Fifty per cent of the GI's in our area who have started appliance stores have either gone out of business or are having mighty hard sledding."

The reason? With the wholesalers old customers come first. "We got 150 radios of one make a month, for example," he continued, "and we could handle 1,000. We're obtaining only 25% as many refrigerators as we could readily sell. Our old customers who have been with us for years get first call on this merchandise. We can't give newcomers, even though they are GI's, special rights."

Besides the merchandise shortage, lack of experience was named as one of the cardinal reasons why veterans are encountering so many difficulties. Said Association President Dewitt Emery:

"We have received hundreds of letters from GI's asking about new ventures they planned to start. Not 5% of the letters indicated the writers knew enough about the business to have much chance."

Never mind their bait. Lets jump in and get a good drink out of that Cordley Water Cooler

CORDLEY AND HAYES
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Box 2014, Air Conditioning & Refrigeration News

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Under the gleaming exterior finish of many of American industry's finest products . . . you'll find Bonderizing!

Bonderizing changes the surface of iron or steel to a phosphate coating which becomes part of the metal itself. It anchors the finish to the metal and prevents the spread of rust from abrasions or scratches.

Bonderizing adds a known quality factor, as well as protection from rust and untimely finish failure.

PARKER RUST PROOF COMPANY—2170 E. Milwaukee Avenue—Detroit 11, Michigan

PARKER PRODUCTS CONQUER RUST

Washer Parts Jobbers Urged to Revamp Business to Meet 'Post Boom' Conditions

DETROIT—"According to some of the figures available, it seems that the dollar volume of the washing machine parts business will maintain itself for approximately one year, after which we can probably expect a 25% drop."

So writes David Goldfarb, chairman of the policy development committee of the Appliance Parts Jobbers Association, Inc., in a bulletin designed to answer the questions of parts distributors everywhere.

With proper management, however, it will be possible for the parts jobber to maintain his profit ratio, if he adheres to the following principles, according to Mr. Goldfarb:

(1) Strengthens his business to meet the changing conditions.

(2) Explores and analyzes the territory he covers.

(3) Finds ways and means of promoting the parts business that he was previously not interested in and totally disregarded.

(4) Seeks to promote his business in the same manner that the department stores promote their merchandise.

"The parts distributor is coming into a new era, and must adjust himself to it rather than going on in the way he has done during the war period or prior to the war," he stated.

The many advantages that were accrued during the past four years must be enhanced. Manufacturers', product distributors', and parts jobbers' cooperation must not only be maintained but enlarged, Mr. Goldfarb continued.

Ethics Need Improvement

"Ethics of our parts distributors must be improved upon," he continued. "Through the Appliance Parts Jobbers Association, the parts distributors must set up firm policies to be followed by all its members.

Inasmuch as the manufacturers and product distributors do not have a coordinated parts and service program, and are themselves in a state of confusion regarding this matter, it is necessary for the parts distributors to formulate a policy by which to develop economically sound practices that will be beneficial to all concerned, writes Mr. Goldfarb.

In reply to the washing machine parts distributor who asks:

"Should I go into the appliance business to maintain my dollar volume?" Mr. Goldfarb offers the following information:

"The mark-up on appliances, taking into consideration the cost absorption as ordered by OPA, is approximately 33% on major appliances and 37% on traffic appliances.

"The mark-up on percentage of profit on appliances, when one considers cost of operations, is not conducive to legitimate returns on the investment, and without proper management, even a loss can result."

Some figures have been collected which show on a total volume of $15,000 a year in the sale of appliances, an approximate profit of $50 a week was the result, he pointed out.

"There are approximately 120,000 electrical appliance dealers in business today compared to 30,000 prior to the war. There is not enough merchandise available to supply all of these dealers, and even if there was, the profit ratio would not be sufficient to maintain them indefinitely," he believes.

"Thus it must be expected that one out of every three dealers will fail in 1946; one out of every five in 1947; and two out of every six in 1948," Mr. Goldfarb predicted.

1,500,000 New Washers Seen

"It can be estimated that there will be approximately one and one-half million washing machines produced and sold within the next year, and 17,000,000 washers will continue to be in need of parts and service for their proper maintenance.

"From the washers that will be purchased, there will be approximately 500,000 washers traded in, of which approximately 300,000 will be repaired and resold," he predicted.

"Many of the washers that will be replaced are machines that have been obsolete for years, and these replacements will not directly affect the parts volume within the next five to eight years."

The probable market for the sale of washing machines was played down by Mr. Goldfarb.

"When the Department of Commerce asks for unfilled orders in a given industry, it gets from two to five times the actual demand, because retailers place the same orders simultaneously with six or eight prospective suppliers," he pointed out.

Another gauge that has been used for measuring the demand is that in 1941, the last year that washing machines were manufactured, there were 1,500,000 units produced. Inasmuch as no washing machines were produced over a period of four years thereafter, the 1941 production is multiplied by four, giving a total of 6,000,000.

"Obviously these estimates are very, very optimistic, for many factors enter into the consumer demand, such as finance, work, income, and savings," continued Mr. Goldfarb. "The probable demand is fixed by manufacturers at 3,000,000 units."

It has been estimated by the Treasury Department that the average working man accumulated a reserve of approximately $1,000 during the war period. Of the war bonds sold, 36% were sold to the working class. At the present time, redemptions are running 25% ahead of purchases.

"The cost of living has increased 34% since 1941, and the total wage increases over the same period have averaged about 30%.

"As a result the business index has dropped from a high of 230 prior to V-E Day to 170 thereafter, and there it has remained. Bank deposits have declined; this has been attributed to strikes and lower take home pay.

"If the ultimate consumer contemplates buying an automobile, refrigerator, or washing machine even on a credit basis," Mr. Goldfarb continues, "his probable monthly payments for all commodities would run about $90 a month.

"The average working man's salary today is $196 a month, which further strengthens the belief that the average consumer will not be able to purchase all of his needs at one time, but will purchase the ones that are most important first."

Mr. Goldfarb believes that the returned war veteran is the only class of purchaser that can provide any kind of sales volume in the appliance field.

"There need be no fear as to the future of the parts jobber, for over a period of years he has proven his worthiness in the industry," he writes in conclusion. "Daily he is becoming a more important segment to the manufacturer and distributor."

Rural Electrification to Aid Nebraska Appliances

LINCOLN, Neb. — Unprecedented opening of new Nebraska territory to use of electrical appliances was foreseen by the state railway commission in rural electrification projects that have started construction or have been authorized in recent months. One of the most recent applications to be granted by the commission was to the McCook Public Power district for authority to construct 325 miles of electric transmission lines in Red Willow, Hitchcock, and Frontier counties.

A $4,209,800 expansion of the Nebraska Public Power System to be carried out in the next three years was announced by George E. Johnson, chairman of the board of managers of the system and chief engineer and general manager of the Central Nebraska Public Power district. He said the program will be carried out as fast as materials and equipment are available.

An application has just been filed with the state commission by the Norris Rural Public Power district for authority to construct 181 additional miles of lines in Lancaster, Gage, Saline, Thayer, Jefferson, and Fillmore counties. The same district has been expanding rural lines rapidly in the Lincoln area.

Loflin Appliances Opens Up in Dahlonega

DAHLONEGA, Ga.—Paul F. Loflin, formerly of Gainesville, has opened the Loflin Electrical Appliance Co. in Dahlonega.

The company will concentrate its efforts chiefly on electrical and butane appliances for rural use, according to a statement by Mr. Loflin.

Order Monday—Get it Friday!
REFRIGERATOR & APPLIANCE TRUCK $19.95

Handee All Steel Trucks with extra wide nose, 13' web strap; Rubber tires; 600 lb. cap; height 47"; 5 x 2" wheels; 1" tube steel frame; roller bearings; easy rolling. For medium size appliances and refrigerators and for all general purposes. Not padded. Shipped same day order received. Return express collect if not highly useful to you. 1% 10 days. Order from
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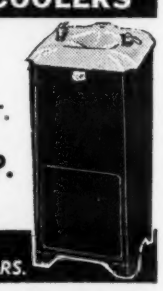
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LA CROSSE TOOLING EQUIPMENT
Look for the LACROSSE emblem for Assurance of Quality and Performance.
Walk-In, Beer Dispensing and Beverage Coolers
BLUE RIBBON FARM MILK COOLERS
LACROSSE COOLER CO.
LACROSSE, WISCONSIN
Formerly La Crosse Novelty Box Mfg. Co.

There's a great family resemblance in Redmond MICROMOTORS

• THEY'RE consistently good little Micromotors—no trouble, no noise—just give them a few drops of oil once in a while. Performance is absolutely dependable year in and year out. It's a grand feeling, bringing up this swell family of Micromotors.

A. C. Micromotors in sizes up to 1/25th horsepower, D.C. Micromotors up to 1/20th horsepower, Speed Controllers, and Blowers.
Redmond COMPANY, INC.
OWOSSO, MICHIGAN, U. S. A.
5 ACRES FLOOR AREA • OVER 2000 EMPLOYEES

STANGARD
Prime Surface
COLD PLATES
For Maximum Refrigerating Efficiency

THE STANGARD-DICKERSON CORPORATION
46-76 Oliver Street • Newark 5, N. J.
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They'll Do It Every Time . . . . By Jimmy Hatlo

MR. BIGDOME, I'M CHAIRMAN OF THE OFFICE SOCIAL COMMITTEE, AND WE WANTED TO KNOW IF THE FIRM WILL DONATE PRIZES FOR THE EVENTS WE'LL HAVE AT OUR PICNIC ··· AND I WANTED TO TAKE UP THE MATTER OF UNIFORMS FOR OUR SOFTBALL TEAM -
BIGDOME'S STILL WORRYING ABOUT RECONVERSION - LOOKS LIKE ALL HE'LL HAVE TO DO IS TURN THE BUSINESS INTO A SOCIAL CLUB -
IF NELLIE DON'T DO A LITTLE OFFICE WORK, SHE WON'T BE AROUND TO GO TO THAT THAR PICNIC
THAT CHAIRMAN STUFF IS GOOD··· SHE'S ALWAYS SITTING DOWN
SHE'LL HAVE TO BE RUNNING A BENEFIT FOR BIG-DOME SOON, THE WAY THINGS LOOK
5-17
COPR. 1946, KING FEATURES SYNDICATE, Inc., WORLD RIGHTS RESERVED.
LISTENING TO THE OFFICE CHEERLEADER SAY THE WRONG THING AT THE WRONG TIME.
Thanx to PEGGY MARKHAM, DES MOINES, IOWA.

Out With Special Privileges--Revise the Wagner Act!

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KOLD HOLD!

No matter whether it's frozen foods picked six months ago, or milk, meat, ice cream or other types of perishable products, Kold-Hold equipment gives safer storage and transportation at lower cost. Kold-Hold Serpentine Plate Type Evaporators have no equal in efficiency and dependability for locker plant space cooling, for shelves and stands in sharp freezing, or as cabinet liners, shelves and dividers. Kold-Hold Evaporators maintain the temperature of delivery bodies at the uniform level necessary in the successful transportation of fresh meat, ice cream, frozen foods and other perishables.

Kold-Hold gives you these advantages:

1. Maximum prime surface.
2. Highest rate of plate heat acceptance obtainable for low temperature work with natural convection low sides.
3. Minimum pressure drop.
4. Freedom from oil logging since the refrigerant circulates freely from inlet to outlet.
5. No chance of short-circuiting of the refrigerant.
6. Maximum K factor.

REMA CONVENTION

Don't miss the convention of the Refrigeration Equipment Manufacturers Association to be held in Cleveland Public Auditorium October 28 to October 31. You can see all the Kold-Hold products at our space No. 416.

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500 North Grand Avenue Lansing 4, Michigan

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AIR CONDITIONING AND REFRIGERATION News

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Thank You, Mrs. Roosevelt, For Those Kind Words

NEVER thought we'd see the day. But here we are, taking a deep bow in the direction of Eleanor Roosevelt. It isn't often that we read her newspaper column, "My Day." By chance we did, the other evening, and this is what met our startled gaze:

"One of the best ways to help the food situation throughout the world is for everyone who can do so to have a garden, and to put up anything they can't eat now so they can enjoy it next winter.

"Of course, if you happen to have a deep freeze, you already know the joys of taking out your vegetables or your fruits and using them all through the winter and spring. Many things are far better put into the freezer than preserved in any other way, particularly now when there is such a shortage of sugar, for one can do so much better in the deep freeze with less sugar.

"I have only just finished using up peaches which I put into the deep freeze last summer.

"I can vouch for the fact that they made very good peach shortcake. The things, however, which give me real joy are those which I have grown myself.

"I find that peas and beans, beets and carrots, put straight from the garden into the deep freeze, come out just like fresh vegetables.

"During these two or three weeks while I am away from Hyde Park, everything possible is going into my deep freeze, since I cannot be home to eat part of it now.

"I did drive up to Hyde Park late Saturday afternoon with three guests, and we enjoyed our country produce for dinner."

Hats off to you, Mrs. Roosevelt! That's the best plug the home freezer business has ever received from a figure-in-the-public eye.

Inasmuch as her loyal following probably numbers up into millions, this free advertisement for the best method of preserving foods may create a whole flock of new converts to belief in the Age of Frozen Foods.

Only trouble is, the industry is in no position to follow it up. Hardly any of the major manufacturers are in production on frozen food cabinets. Shortages of steel, copper, motors, and condensing units are so severe that nothing much can be done about the situation.

Whatever quantities of these scarce items the manufacturers can manage to snare they channel into the making of standard household refrigerators.

This time last year the major manufacturers were concerned about the probable influx of a horde of newcomers to the frozen foods cabinet manufacturing business. In their opinion, these newcomers might mess up things and "muddy the waters."

It hasn't worked out that way. Most of the freshmen have flunked out, seeing no hope of getting the parts and materials they need to get going. Those who have managed to produce small quantities of home freezers actually have helped keep the business alive.

Thanks to their efforts, it is possible to buy a frozen foods cabinet here and there nowadays. And so interest in this new business, which has such tremendous potentialities, is being maintained.

We'd like to hear from you again a year from now, Mrs. Roosevelt. Glad to have you on our side!

Installing a TRAP-IT ...improves ANY Refrigeration System

TRAP-IT

Refrigeration Parts Jobbers stock the A-P "TRAP-IT" in 3 sizes — for system of 1 ton, 2 tons and 4 tons Freon capacity, or double this capacity in Methyl Systems. Put A-P "TRAP-IT" to work for your benefit now.

Give your customers an extra "guarantee" against common troubles! Install an A-P "TRAP-IT" Filter-Strainer on *any* refrigeration system, new or old. You'll save yourself many extra callbacks, and avoid many minor service difficulties.

A "TRAP-IT" quickly removes dirt, solder particles, scale, and gummy deposits—impurities which too often result in sticky and clogged vales and other system troubles. The A-P "TRAP-IT" is as effective as a 900-mesh strainer—yet it offers *no appreciable pressure drop*. Starts cleaning up your refrigeration system immediately—for smoother valve operation and system efficiency.

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Dependable REFRIGERANT VALVES

MADE AND SOLD BY GOOD REFRIGERATION JOBBERS EVER... ...ATION SERVICE ENGINEERS

How Design 'Holds Line' on Locker Plant Operating Cost

Iowa Firm's Methods of Curbing Cost, Saving Labor Analyzed In Outline of Layout Principles

SIOUX CITY, Iowa—Using separate compressors for high and low temperature applications is one of the several principles followed by Refrigeration Engineering, Inc., refrigeration contractor here which has specialized in locker plant work, in striving for the twin goals of minimum operating cost and minimum labor expenditure.

These principles, which the firm believes "all tie in together to create an efficiently operating plant," were outlined recently by Oran C. Mayes, secretary and general manager.

"We try to design our locker system so that it requires a minimum amount of labor to operate it," Mr. Mayes said.

"We also give much consideration to designing the plants and selecting the refrigeration equipment so that the electric power and water usage is held to a minimum, thereby creating the condition of a locker system that is low in total operating cost." This, he stated, "always increases profits to the operator and satisfaction to his customers."

The firm has found that splitting compressors between high and low temperature work is one way to reduce operating cost and increase customer satisfaction.

"We find it very satisfactory to connect the curing room, chill room, aging room, and offal cooler (if any) to one condensing unit which we control by low pressure control," Mr. Mayes explained.

Separate Units Favored

"We have also found it quite desirable to use a separate condensing unit for the sharp freeze and locker room in most cases. However, the idea of using one or two condensing units for the locker room and sharp freeze is sometimes determined by what size units are available and sometimes the customer has a definite preference."

When two condensing units are used for the locker room and sharp freeze, they quite often are connected "so that the customer can switch the whole load to one machine in case of emergency."

If only one unit is employed, Mr. Mayes said, a solenoid valve is installed in the liquid line of the locker room and is operated with a two-circuit thermostatic switch.

"When the locker room calls for refrigeration, one circuit of the switch will magnetize the solenoid and the other circuit will start the condensing unit," he stated. "In order to have the sharp freeze independent so that it is available to handle the freezing load at any time, we also control this room with a thermostatic switch that starts the compressor whenever the sharp freeze calls for refrigeration.

"We have found that this type of control enables the locker operator to freeze an excessive amount of food products one day and a minimum amount at another time, and at the same time maintain an accurate proper temperature in the locker room whether it is 100° outside or below zero."

Mr. Mayes declared that in some cases in which the firm added an extension doubling the size of the original plant, the operating cost had been increased only 10 or 15% when separate compressors were used for the high temperature coolers and for the sharp freeze and locker room, instead of one compressor for the whole plant.

Another Cost Cutter

Another way Refrigeration Engineering holds down operational cost is to build the sharp freeze cabinets or rooms inside the locker room, a thing it almost always does. By doing this, according to Mr. Mayes, "it is possible to shut off the sharp freeze system when it is not needed. . . . It will not warm up enough to bother. . . ."

In this case, it was pointed out, the sharp freeze is constructed so it will line up with the lockers both ways. For instance, when the lockers are 24 in. wide and the aisles 36 in., the sharp freeze usually is built 6 or 8 ft. one way and 8 ft. the other.

As for the kind of cooling equipment for the sharp freeze and the locker room, the firm's opinion is that both the plate or coil-type evaporators and forced air low temperature unit coolers are satisfactory when installed properly. Both have been tried; neither was found wanting.

"When we use plate-type evaporators or pipe coils to cool the locker room, we always install hot gas defrost systems and our customers tell us this is a vast improvement over trying to scrape the frost off the cooling units," Mr. Mayes said.

"In fact, in some cases where the operator was unable to maintain a correct locker temperature in very hot weather in some of the old plants, we have corrected his difficulty without doing anything else except to install a hot gas defrost system so that his evaporators would again operate at full efficiency.

How Coolers Are Picked

"We do not know exactly how much the capacity of plate evaporators is reduced by a heavy coating of frost and ice, but we firmly believe that it is as much as 50% in some cases."

Low temperature unit coolers are selected by the company on a basis of 8 to 10° temperature differential. This has been found to work out "very satisfactorily in actual practice for both freezing and locker room use."

A further means of keeping operating cost at a minimum is the use of 8 to 12 inches of insulation, which also provides a longer period of holdover or a slower warm-up in case of emergency.

Installation of a track system is regarded as one of the main ways to save labor, the other prime consideration of Refrigeration Engineering in designing locker plants. Beginning in the slaughtering area, the system should run into the chill room, on to the aging room, and then extend over the meat block where the operator breaks the carcass for the power saw.

"Because some customers do their own butchering and deliver the carcass meat to the locker system, it is desirable to have the track system extend out over a loading platform and to use a hoist to lift this carcass meat onto the track," Mr. Mayes suggested.

"A track-type scale should be installed in such a location that the carcass meat unloaded at the customers' entrance and the carcass meat coming from the place of slaughtering can both travel over the same scale. The total weight of the carcass should be recorded at that time on the work ticket."

It is the concern's practice to build a separate chill and aging room. A high velocity forced air unit cooler is employed in the chill room to reduce the temperature of the carcass rapidly. In the aging room, a low air velocity unit cooler is used, selected on the basis of a 10° temperature differential to assure high humidity and a minimum of dehydration.

Slime Eliminated

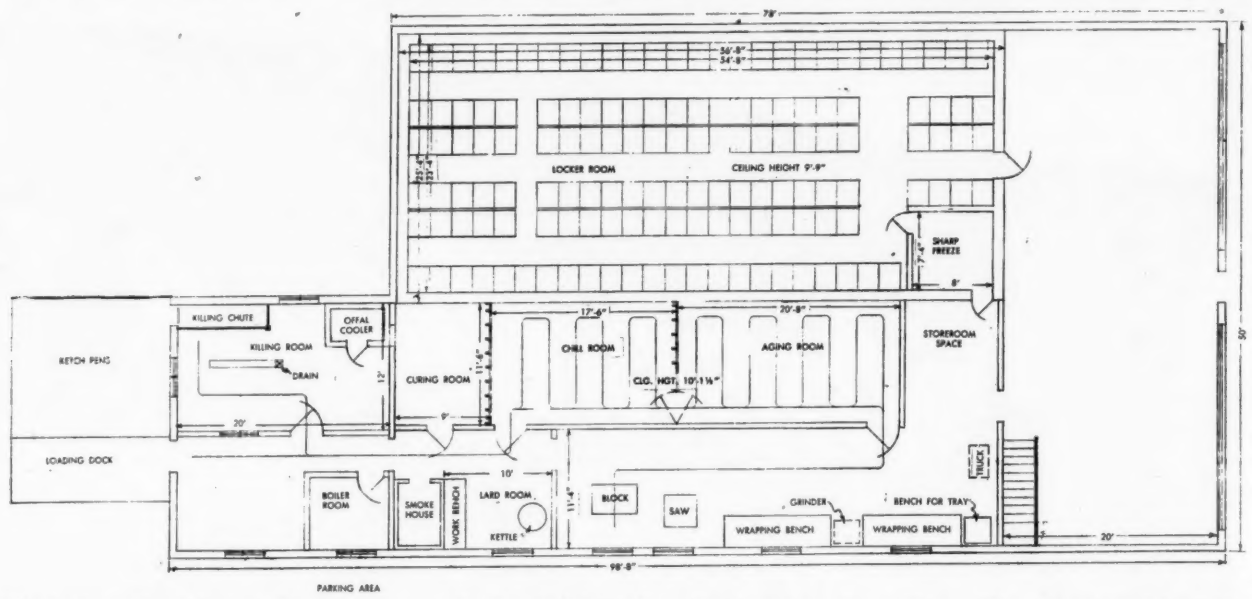
The firm's theory is that by having two separate cooling rooms, "we eliminate the idea of slime condensing on the cold meat when freshly butchered carcasses are brought into the chill room."

Still another labor-saving design feature is a door leading from the cutting room directly into the sharp freeze "so that the customer can insert the freezer trays in the sharp freeze without walking into the locker room."

In addition to being a locker contractor, Refrigeration Engineering is a distributor of General Electric air conditioning and commercial refrigeration products. It handles cold storage equipment, display cases, reach-in refrigerators, walk-in coolers, home freezers, and unit and central plant air conditioners.

The firm, of which George M. Sharp is president, is located in the Warnock building here.

- - And Here's How Locker Plant Principles Were Applied In One Case



This locker plant layout drawn up recently by Refrigeration Engineering, Inc., Sioux City (Iowa) refrigeration contractor, reflects the principles followed by the firm in aiming for minimum operating expense and minimum labor expenditure. These principles are discussed in the accompanying article by Oran C. Mayes, general manager of the company.

Birds Eye Snider Opens 'Largest' Freezing Plant

WALLA WALLA, Wash. — The world's largest quick-freezing plant was opened here on July 13 by the Birds Eye Snider Co.

Visitors saw fresh peas unloaded, processed, and packaged ready for the freezer in less than 10 minutes.

The plant delivers 280 tons of peas daily into its vast zero temperature storage room. From this room four refrigerated freight cars may be loaded simultaneously by a conveyor belt system, it was said.

F. Lowden Jones, president of the local chamber of commerce and a director of the National Canning Association declared the opening to be a landmark in the history of Pacific northwest agriculture.

For DEPENDABLE Refrigerants

SPECIFY "EXTRA DRY ESOTOO" (Liquid Sulfur Dioxide)

"V-METH-L" (Methyl Chloride)

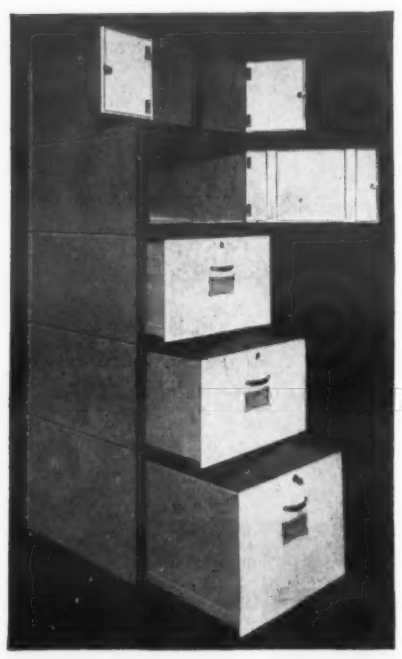
Distributors of "FREON" REFRIGERANTS 11, 12, 21, 22, 113

VIRGINIA SMELTING COMPANY
WEST NORFOLK, VIRGINIA
NEW YORK • BOSTON • DETROIT

Since 1935

AN UNBEATABLE COMBINATION
YOUR PLANT -|- MASTER

To the thousands upon thousands of Locker plants from coast to coast, the name MASTER means quality with no qualifications. Join these thousands of Locker Operators by demanding the



MASTER FOOD CONSERVATOR

This completely individual storage locker is another outstanding example of MASTER engineering and foresightedness. That's why it's the "Choice of the Industry."

WE'VE NEVER LET YOU DOWN

Today as always, you can depend on MASTER. We are not only *holding down* prices but even with the shortage of materials, production and shipments are being stepped up as rapidly as possible.

Endorsed by and sold through distributors of refrigeration and insulation.

MASTER MANUFACTURING CORP.
121 Main St. Sioux City 4, Iowa

Member of Frozen Food Locker Manufacturers and Suppliers Ass'n organized for your protection.

Over 800,000 Master Food Conservators in Use

A FAITHFUL GUARD FOR THE NATION'S FOOD SUPPLY
LARKIN
REFRIGERATION PRODUCTS

Write for New Catalogue

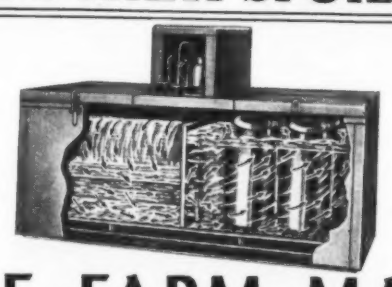
Humi-Temp Forced Convection Units—Patented CROSS-FIN-COILS—Bare Tube Coils—Zinc Fused Steel Plate Coils—Disseminator Pans—Heat Exchangers—Evaporative Condensers—Instantaneous Water Coolers—

LARKIN COILS, 519 Memorial Drive., S.E., Atlanta, Ga.

WILSON SELF-CONTAINED AUTOMATIC HIGH WATER LEVEL ZERO-FLOW

STOPS MILK SPOILAGE

COOLS THE DANGER ZONE FAST



Wilson ZERO-FLOW MODEL ZF8 HX50

Packaged-Unit Milk Cooler Sizes from 4- to 24-can capacity

TO CAPTURE AND HOLD THE FARM MARKET

Specify Genuine "Refrigeration by Wilson"

• FARM MILK COOLERS • FARM FREEZERS • FARM REACH-IN REFRIGERATORS • FARM WALK-IN REFRIGERATORS

For Franchise Information, Address Dept. 11 WILSON REFRIGERATION, INC., Smyrna, Delaware

INSIDE DOPE

by GEORGE F. TAUBENECK

(Concluded from Page 1, Column 1)

Progress Endangered

Here's a significant quote:

"Industry fully realizes that research pays dividends," according to Dr. R. C. Newton, vice president in charge of research for Swift & Co., "but it should also recognize that if industrial research is to flourish it must have an adequate storehouse of basic scientific facts upon which to build.

"Leaders in science have expressed the belief that we are using up our storehouse of basic scientific facts faster than we are adding to it.

"Much concern has been expressed over this situation, but not because the pace of applied science is increasing so fast. Everyone agrees this is a good thing. Apprehension develops chiefly because support of exploratory research has not been proportionally emphasized."

It is true that a well-founded fear exists in many quarters that the source of endowed research normally expected from wealthy individuals and estates may "dry up," because present tax laws are so confiscatory.

If basic scientific research is to continue, then, it probably must be supported from current earnings of industry.

Without basic scientific research, American industrial progress may "dry up," too.

Progress feeds upon new things, new learning, new ideas—all of which lead to new or better products.

What's the Answer?

Here's a painful problem: the dilemma of the Returned Vets who have heard that air conditioning and refrigeration are headed for a booming expansion.

Too many of these hopeful laddies expect to be paid $100 per week for just taking it easy, and "learning."

They're due for a rude awakening, sad as it may seem.

"In these cost-conscious days, the "big money" jobs must be *earned*.

Let's quote just one of many typical letters which bear upon this serious problem:

AL SCHOEN'S
Air Conditioning & Refrigeration Co.
General Electric Air Conditioning
Authorized Service Dealer
2604 Sixteenth St.
Sacramento 14, Calif.
Air Conditioning &
Refrigeration News,
Detroit, Mich.
Editor:

In this district we have entirely too many discharged veterans who have seen the possibility of a lot of glamor in the refrigeration industry; but who overlook the fact that plenty of hard labor plus training is necessary to become anywhere near proficient in the maintenance of equipment in our trade.

Several vets have been disappointed in my attitude toward them. But it is impossible and unwise to give them all encouragement, since it is impractical to attempt to train apprentices without at least three journeymen for each apprentice.

Were we able to obtain adequate material to keep our doors open, without having to spend half of our waking hours trying to wheedle somebody out of some halfbreed, nameless piece of junk, all of us might be able to accomplish a lot more for the advancement of the refrigeration industry.

Sorry to run off at the mouth, but dammit we need some relief out here at least.

ALLYN W. SCHOEN

P.S.: Forgot to mention that the NEWS has been doing a swell job during difficult times. Keep on carrying our torch and we'll all make out, somehow.

Quoting Les Bower

When it hasn't rained for weeks, none of us feels like stirring out of a comfortable sprawl to repair a leaky roof.

Today merchandising organizations in this industry are enjoying a prolonged "dry spell." There are so many more customers than products that the idea of "selling" seems antiquated.

But it will rain again. It always does. And rainy spells often arrive when you least expect them.

In a recent bulletin to the Sherer-Gillett merchandising force, Les Bower tells a peach of a story which everyone in this industry should heed. Mr. Bower, front and center:

"The war years saw what we thought was the peak of a new American habit—standing in line. Yet, now that we are in a postwar era, there probably are more standees on the whole than ever before.

"We stand in line for meat—nylons—soap—bread—flour and, in effect, we're standing in line when we register for a new refrigerator, new automobile, new tires, or whatever it is we want, but can't get right away. Standing in line is part of the American scene.

"I was in Memphis a few weeks ago visiting our distributor there; and during the course of my visit, C. Louis Gibbes, Jr., mentioned that he'd been surprised to find upon his return from the army that he didn't need to *sell* refrigerators—that if he had one, all that was necessary was to take the money and make delivery.

"Louis figured that in one respect that was all very fine, but it was a new experience to him to have buyers standing in line. On sober second thought, he came to the conclusion that there was a bad feature to it—that after a few years in the army and a couple of years of a seller's market, he would become rusty—he wouldn't know *how* to sell.

"He went on to tell me: 'I've adopted a policy of trying to sell something to everyone who comes into our place. If they only want a set of hardware, or a valve, or a fan belt, I'll start in to try and sell them a refrigerator. I want to keep my hand in on the selling game against the time when we'll actually have to do a selling job.'

"I think Louis Gibbes is right. In talking refrigerators to every potential user who comes into his store, he is advertising Gibbes and Sherer as a source of refrigerators. It reminds me of one of the large automobile manufacturers who was asked why he continued to advertise when he couldn't deliver the cars. He quickly replied: 'Everyone has to stand in line and wait, but we prefer to have buyers stand in *our* line.'"

QUICFREZ Model No. 1245 12.5 Cu. Ft. with Separate Freezing Compartment and Divided Storage

SANITARY Quicfrez FARM LOCKER PLANT FOND DU LAC, WIS., U. S. A.

SINCE 1939...

With a long experience background in the building of Farm Locker Plants, SANITARY's specialized skill and know-how in this field insure utmost customer satisfaction.

SANITARY REFRIGERATOR CO.

Fond du Lac, Wis.

Refrigerator Manufacturers for Over 40 Years
Farm Locker Plants since 1939

MEN WANTED

by Nationally-Known

REFRIGERATION MANUFACTURER

• Refrigeration Engineers

College graduates preferably with refrigeration experience, to do laboratory testing and developing of refrigeration units and components. Excellent opportunities for advancement.

• Design Checker

Must be experienced drafstman able to check blueprints for correctness, and good in mathematics. Good starting salary with chance for advancement.

Write giving complete information on experience and training.

Box 2039

Air Conditioning & Refrigeration News

It's a REVELATION —that's all!

★ Exclusive Dealer Franchise
★ Now in quantity production
★ All sizes: Industrial and Commercial
★ The last word in...

ELECTRIC WATER COOLERS

Revelation Company
Division of
Interstate Engineering Corporation
2600 Imperial Highway
El Segundo, California

Balanced Performance
For more economical more dependable REFRIGERATION
You can't beat PAR
air-and water-cooled models
From 1/6 to 5 horsepower.

PAR BY Lynch

ON the job performance gives definite proof that for economical, dependable operation you can't beat Par. Par's many outstanding features give added efficiency, long life, and trouble free service.

See your Par wholesaler for complete details or write for Par Catalog R-97.

PAR—Condensing Unit Line sold exclusively through Franchised Refrigeration Equipment Wholesalers!

Lynch . . . By Comparison — You'll Buy PAR
Manufacturing Corporation
General Offices, Toledo 1 • Factory, Defiance, Ohio, U.S.A.

Comment on Commercial Refrigerator Dealers' 1941 and 1945 Operating Ratios And Methods of Putting Survey To Use

Editor's Note: The following article discusses the survey prepared for Commercial Refrigerators Manufacturers Association by Dun & Bradstreet which has been published as the CRMA "Dealers Operation Manual." Charts, tables, and excerpts on the following page are taken from the manual.

By Rhae M. Swisher, C.P.A. and Management Consultant, Chicago

Every business enterprise, it must be presumed, exists and operates for the purpose of earning profits. Where the enterprise is a proprietorship or a partnership, the profits earned provide income for the individuals' living expenses currently and for accumulation of funds for future security. The return on capital is often secondary in such enterprises, because the amounts of profits earned depends upon the efforts and intelligent application thereof by the individuals.

Where the enterprise is a corporation, very often the attitude toward profits primarily centers around the idea of a satisfactory return on capital invested by others, as well as the officers, and the matter of providing a living for the individual operators becomes secondary as the profit objective.

Because of this fundamental variance in attitude toward profits, the corporation often offers inducements to the operators in the form of bonuses or incentive arrangements to encourage an alert attitude toward the earning of profits. Very often, these incentives are offered "down the line" to employes whose functions are not discretionary for the mere purpose of encouraging them to work harder.

But, nevertheless, the earning of profits is the fundamental objective of any business activity!

It has been found that profits usually accompany good management, and management is usually good management to the extent of its use of intelligence in its decisions, in its formulation of policies, and in its manner of administration. Intelligence is knowledge, so it must be deduced that intelligent management is that which avails itself of *usable* knowledge. This is the niche in business management which is supplied by surveys—or the gathering and interpretation of data—covering the various aspects of a business or an industry.

In the foreword of this survey is a most pertinent paragraph. "Knowledge of what others have done in past years can provide standards by which a dealer can check his own performance. Such standards can also assist him in planning for profitable operation in the future."

The purpose of this commentary is to suggest how the knowledge which has been accumulated and set forth can be applied effectively to the operations of dealers in commercial refrigeration, and to the manufacturers supplying these dealers.

Let us first consider the study from the standpoint of the refrigeration manufacturer, because he depends upon the dealer for distribution of his product. The dealer, therefore, is important as his merchandising outlet.

A *good* dealer—one whose operations are aggressive, efficient, and intelligent—is an asset in the manufacturer's distribution set-up. A *poor* dealer—one whose operations are sluggish, inefficient, and haphazard—is a distribution liability.

The dealer whose operations are neither wholly good or wholly poor—one whose operations are aggressive, but inefficient or haphazard—or sluggish in sales but efficient in financial management—or other combinations of good and bad operating characteristics, is a "border-line" cog in the manufacturer's distribution set-up. But all three groups of dealers require the manufacturer's attention—each, however, from a different approach.

The good dealer should be encouraged. He is rarely a perfect operator, even though by comparison with other dealers he ranks high. He can probably do a better job of selling, he may be overlooking sales opportunities which the manufacturer can call to his attention. His shop management may be not as effective as his sales performance. The manufacturer's representative may be able wisely to counsel with the good dealer and materially assist him to improve his performance, his margin of operating profit, and his working capital condition.

The manufacturer should keep constantly in close touch with the good dealer—and never, just because he is a good dealer, assume the attitude of "let well enough alone."

The poor dealer should be approached on the practical basis of "either become a good dealer—or make room for a good dealer." This may in some cases be difficult because of circumstances such as a long period of association, a personal friendship, an involved credit situation, or some other tie of a difficult nature. But effective distribution of the manufacturer's product is at stake and the liability of poor representation should be corrected.

The borderline case—because it is usually a difficult situation—provides the best measure of the manufacturer's cooperation policy. Here the problem is two-fold—first, to preserve the dealer's good features, and second, to help him to correct his weak points. This requires the exercise of tactful, frank, intelligent, and patient cooperation with each such dealer. Each case will probably prove to be a different problem, which must first be carefully analyzed and studied before the proper remedies can be suggested.

Now, let us consider the survey from the standpoint of the dealer, because in the light of the foregoing discussion, the manufacturer and the dealer are on common ground. However, for the manufacturer to participate fully in the benefits of this study he should have the operating statements of his dealers in his files, probably in his credit files. If not, he should request the necessary information from his dealers on the basis of mutual confidence and as a means of effective cooperation.

The first step is *comparison* of the individual dealer's figures with the applicable statistics supplied in the survey.

As a starting point, prepare a six-column analysis from Tables 2 and 2a as shown above, using the statistics of the sales group, which applies to the particular dealer's situation.

Your curiosity will be aroused as to the reasons for the variations indicated in Columns 3 and 6. The data can also be filled in on the form provided on page 32 in the manual, but the foregoing analysis will be helpful to you before attempting to fill in the form on page 32.

After the six-column analysis has been made, refer to the statistics on page 10, applicable to *your sales group*. Note the variations in gross profit, operating expense, and net profit before taxes, and compare the high and low for each item with *your* percentage.

The search for an understanding of the variations between your results and the results of other comparable dealers, in sales groups, in profit groups, and in types of location groups—which can be found in the manual—will raise some most pertinent questions in your mind, such as—

Are my sales as high as they should be?

Are my salesmen's individual sales as high as they should be?

Is my shop operating efficiently?

Are my selling expenses too high for the results obtained?

Are my selling expenses so low that sales are suffering?

Are my other expenses too high?

Is my inventory turnover satisfactory? Etc.

If you have asked yourself these and other questions, naturally your thought will follow in the direction of setting a performance standard for your business, and the next natural step will be to construct the performance goal or objective suggested on page 32 of the manual.

Prepare this budget—or goal—and strive to attain it. Then, at the end of each month—compare your actual performance with your budget—and again determine the causes for the variations. Continue this month after month. ***It will be the most profitable habit you ever acquired!***

How a Dealer Can Compare His Figures With Those In Survery

Col. 1 1941 survey statistics	Col. 2 Your 1941 statistics	Col. 3 Comparison + or —	Col. 4 1945 survey statistics	Col. 5 Your 1945 statistics	Col. 6 Comparison + or —

Table 1. Typical 1941 and 1945 Ratios, All Concerns

Description of Concerns Analyzed	Typical Ratios 1941	Typical Ratios 1945*	Range of Usual Experience 1941 Quartile Lower	1941 Quartile Upper	1945* Quartile Lower	1945* Quartile Upper
No. Concerns Reporting	80	95	....	....	....	....
Aggregate Net Sales	$10,073,000	$7,309,000	....	....	....	....
Typical (Median) Net Sales	$ 61,000	$ 47,000	....	....	....	....
Condensed Statement (% of Net Sales)						
Total Net Sales	100.0	100.0	....	....	....	....
Cost of Sales	68.4	64.6	62.3	73.9	57.2	70.0
Gross Profit on Sales	31.6	35.4	26.1	37.7	30.0	42.8
Total Operating Expense	27.9	25.0	23.6	34.7	17.9	33.5
Net profit (Before Taxes)	3.7	10.4	0.8	7.0	4.7	16.5
Detailed Expenses (% of Net Sales)						
Salesmen's Salaries and Commissions	6.8	4.2	2.6	8.3	0.4	7.8
Traveling and Automobile Expense	2.4	2.5	1.4	4.1	1.1	3.5
Advertising	0.5	0.6	0.2	1.0	0.3	1.0
All Other Selling Expense	1.6	2.0	0.2	3.4	0.2	4.0
Total Selling Expense.	(11.3)	(9.3)	(‡)	(‡)	(‡)	(‡)
Management Salaries	6.6	6.2	4.1	10.9	3.3	8.3
Clerical Salaries	1.9	1.8	1.0	2.6	0.7	2.9
Rent & Building Expense	1.9	2.0	1.1	2.8	0.9	2.7
Bad Debt Losses	0.4	0.0	0.1	0.9	0.0	0.2
All Other Administrative Expense	3.1	2.2	0.9	4.4	1.1	3.0
Total Administrative Expense	(13.9)	(12.2)	(‡)	(‡)	(‡)	(‡)
Shop Expense	2.7	3.5	0.7	5.3	0.6	6.7
Merchandising and Financial Ratios						
Realized Mark-up (% of Cost)	46.2	54.8	35.3	60.5	42.9	74.8
Annual Sales per Salesman§	$21,200	(‡)	$11,700	$31,400	(‡)	(‡)
Selling Expense per Salesman§	$ 2,600	(‡)	$ 1,600	$ 3,800	(‡)	(‡)
Per Cent Earned on Net Worth	17.1	39.7	5.3	31.6	15.1	73.5
Net Worth Turnover (times per year)	4.5	4.2	3.0	7.0	2.3	7.2
Working Capital Turnover (per year)	6.2	5.0	2.9	9.3	3.0	8.9
Current Ratio (times)	3.6	5.7	2.2	6.0	2.6	18.5
Reserve for Losses as per cent of Contingent Liabilities	10.7	5.3	0.7	46.7	0.0	100.0

* First six months of 1945.
‡ Not available.
§ Including owners or officers engaged in selling.

Table 2 and 2a (Combined). Typical 1941 and 1945 Ratios, By Size of Concern

Description of Concerns Analyzed	Annual 1941 Net Sales $100,000 and Over	$50,000 to $99,999	Under $50,000	Net Sales, First Six Months of 1945 $100,000 and Over	$50,000 to $99,999	Under $50,000
Number of Concerns Reporting	26	22	32	23	23	49
Aggregate Net Sales	$7,557,000	$1,579,000	$937,000	$4,362,000	$1,631,000	$1,316,000
Typical (Median) Net Sales	$ 181,000	$ 65,000	$ 30,000	$ 147,000	$ 71,000	$ 27,000
Condensed Statement (% of Net Sales)						
Total Net Sales	100.0	100.0	100.0	100.0	100.0	100.0
Cost of Sales	71.0	67.1	66.5	69 6	67.0	60.2
Gross Profit on Sales	29.0	32.9	33.5	30.4	33.0	39.8
Total Operating Expense	25.6	29.8	28.9	20.5	20.6	30.6
Net Profit (Before Taxes)	3.4	3.1	4.6	9.9	12.4	9.2
Detailed Expenses (% of Net Sales)						
Salesmen's Salaries and Commissions	7.2	5.6	4.1	5.0	2.6	4.1
Traveling and Automobile Expense	1.7	2.6	3.8	1.1	2.1	3.1
Advertising	0.7	0.5	0.5	0.6	0.9	0.6
All Other Selling Expense	1.0	2.9	1.3	1.4	1.4	2.7
Total Selling Expense	(10.6)	(11.6)	(9.7)	(8.1)	(7.0)	(10.5)
Management Salaries	4.2	7.0	11.0	3.4	4.5	8.4
Clerical Salaries	2.1	2.0	1.8	2.1	1.7	2.5
Rent and Building Expense	1.5	2.1	2.4	1.2	1.5	2.4
Bad Debt Losses	0.4	0.3	0.4	0.2	0.0	0.1
All Other Administrative Expense	3.7	2.6	1.8	2.7	2.5	1.8
Total Administrative Expense	(11.9)	(14.0)	(17.4)	(9.6)	(10.2)	(15.2)
Shop Expense	3.1	4.2	1.8	2.8	3.4	4.9
Merchandising and Financial Ratios						
Realized Mark-up (% of Cost)	40.8	49.0	50.4	43.7	49.3	66.1
Annual Sales per Salesman*	$32,700	$21,500	$11,600	....	....	....
Selling Expense per Salesman*	$ 3,500	$ 2,800	$ 1,900	....	....	....
Per Cent Earned on Net Work	15.5	17.7	18.3	65.6	57.6	26.0
Net Worth Turnover (times per year)	5.0	5.3	3.2	5.5	5.3	2.8
Working Capital Turnover (per year)	7.0	7.0	3.7	6.6	5.5	3.7
Current Ratio (times)	2.9	3.4	5.0	3.5	4.6	9.3
Reserve for Losses as per cent of Contingent Liabilities	9.9	10.7	25.0	18.4	0.0	0.0

*Including owners or officers engaged in selling.

It Puts
"The Destructive 3"
Where They Belong!

Yes, rust, corrosion and sedimentation are harmless with a PENN Water Valve. But with an ordinary water regulator they're very much alive... imperiling the operation of a refrigeration or air conditioning system. That's why it pays to use PENN Water Valves.

This new type water regulator is designed to provide dependable, long life performance. *Range springs and sliding parts are never submerged in water.* There is no opportunity for "the destructive three" to get going. With this PENN Valve there are no sticking seats, no rusty range springs. It is extremely sensitive to changes in refrigerant head pressure . . . yet free from water hammer, too.

The PENN 246 is built in two styles—flanged and threaded—in a wide range of sizes. Send for descriptive bulletin. *Penn Electric Switch Co., Goshen, Ind.* Export Division: 13 E. 40th Street, New York 16, U.S.A. In Canada: Penn Controls, Ltd., Toronto, Ontario.

PENN
AUTOMATIC CONTROLS
FOR HEATING, REFRIGERATION, AIR CONDITIONING, ENGINES, PUMPS AND AIR COMPRESSORS

Survey Highlights

1. Margins of Commercial Refrigerator dealers and distributors averaged 31.6% of sales in 1941, 35.4% in 1945.
2. Total Operating Expenses averaged 27.9% of sales in 1941, 25.0% in 1945.
3. Net Profit (Before Taxes) averaged 3.7% of sales in 1941, 10.4% in 1945.
4. The more profitable dealers in the sample had both wider margins and lower expenses than the less profitable dealers. This was true both in 1941 and in 1945.
5. The largest dealers had both smaller margins and lower expenses, on the average, than the smallest dealers.
6. Dealers trading mainly in cities had higher sales volume, narrower margins, and lower expenses, on the average, than dealers serving smaller towns and rural areas.
7. Corporations and partnerships, on the average, had higher volume, lower margins, and—for the most part—lower expenses than dealers operating as individual proprietorships.
8. Sales per salesman in 1941 were highest for the largest dealers; for those in the intermediate profit bracket; for the most profitable large dealers and the most profitable small dealers; for dealers selling mainly in larger cities; and for dealers organized as corporations and partnerships.

Excerpts From Manual Interpret Survey Figures

Profitable Operation

These profit-group ratios are presented in Tables 3 and 3a. And these tables tell the old story—that profitable operation is primarily the result of two factors, merchandise control and expense control.

The most profitable group reports the highest gross margin and the lowest expense; this was true in both years studied. In 1941 the high-profit group of dealers maintained a typical gross profit of 34.4%, and held expenses down to an average of 24.4%, leaving a typical balance of 10.0% as net profit.

The low-profit group, on the other hand, averaged a low gross profit figure of 28.8%, barely enough to cover the relatively high typical expense of 28.7%, and leaving a negligible 0.1% as net profit. In this group of 28 low-profit dealers in 1941, 13 operated at an actual loss.

Much the same applies to the 1945 figures. The low-profit group (of whom 8 out of the 29 were actually unprofitable), however, maintained the satisfactorily high margin of 37.2% (compared with 32.1% of the medium-profit group) but lost all of this advantage, and more, by averaging 33.9% in operating expenses. These low profit dealers appear to be out of line on virtually all their detailed expense items.

Typical Operations In Commercial Refrigerator Distribution

Detailed operating expenses are shown in down the center section of Table 1. Typical Shop Expense in 1941 averaged 2.7%. Total Selling Expense was 11.3%; of this, the major share was the 6.8% paid to salesmen as salaries and commissions.

Traveling and Automobile Expense averaged 2.4%, Advertising 0.5%, and selling expense not allocated to the foregoing categories amounted to 1.6%.

Of the Total Administrative Expense of 13.9%, the most important item was the 6.6% comprising Management Salaries. Clerical Salaries accounted for 1.9%, Rent and Building Expense for another 1.9%, Bad Debt Losses for 0.4%, and Administrative Expense not allocated to the specific accounts mentioned averaged 3.1%.

For the first six months of 1945, the typical detailed expense ratios fell into a roughly similar pattern, with Salesmen's Salaries and Commissions of 4.2% and Management Salaries of 6.2% constituting the major items of expense.

The financial ratios carried at the bottom of the table are measures of the financial condition of the business, and are less closely tied to actual day-to-day operations. Net Worth Turnover (sales per dollar of net worth) shows the relation between scale of operations and investment in the business.

Current Ratio is the measure of a dealer's current liquidity, and Working Capital Turnover (sales per dollar of Net Working Capital) relates current liquidity to scale of operations.

Reserve for Losses as Per Cent of Contingent Liabilities is a test primarily of accounting procedure, the assumption being that losses are always possible on repossessions or on paper held by others, and that realistic bookkeeping must take such possibilities into consideration.

The Influence of Volume

For both years, the largest spread between sales and cost was maintained by the smallest dealers; the largest dealers, on the other hand, had the smallest margin. Part of this disadvantage to the largest operators is made up by their closer control of operating expenses.

In both years, also, typical Salesmen's Salaries and Commissions were relatively higher for the large dealers than for the other size groups.

That these amounts were well spent, however, seems indicated by the significantly higher 1941 sales-per-salesman figures for the large dealers than for the small, an indication of the possibly superior selling efficiency of the typical salesman for the large house.

(Some part of this sales-per-salesman differential may be due to the method of calculating this ratio, which included as salesmen, owners or officers engaged in selling. However, a test of sales per salesman with owners and officers excluded also showed a substantial advantage, though less marked, in favor of the efficiency of the salesmen of the largest dealers.)

A relatively stronger current position is apparent for the small dealers, and at the same time, a lower rate of Net Worth Turnover.

The high expense ratio typical of the smallest dealers is traceable almost entirely to the tendency for small operators to pay themselves as salaries a higher percentage of net sales than do the larger operators. In dollar amounts, these small dealer salaries may be less than those paid by medium-sized and large dealers, but percentage-wise they are larger proportions of net sales.

In the tabulation below are shown, for each size group, the upper and lower limits of the range of usual experience for Gross Profit on Sales, Total Operating Expense, and Net Profit (Before Taxes).

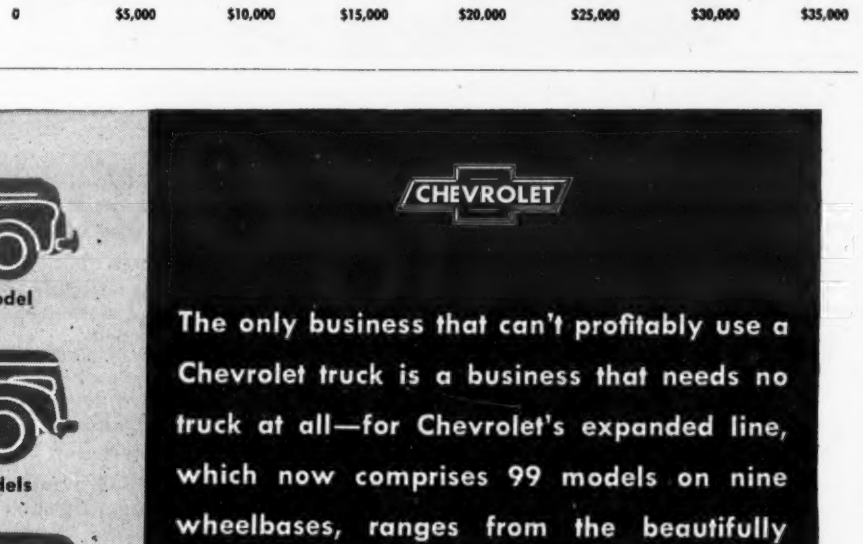
	1941 Lower Quartile	1941 Upper Quartile	1945* Lower Quartile	1945* Upper Quartile
$100,000 and over				
Gross Profit on Sales	21.5	30.7	25.0	36.6
Total Operating Expense	20.5	28.5	17.0	23.6
Net Profit (Before Taxes)	1.8	5.0	4.8	15.4
$50,000 to $99,999				
Gross Profit on Sales	24.7	39.6	28.7	39.2
Total Operating Expense	21.2	37.4	14.9	30.0
Net Profit (Before Taxes)	1.3	7.8	7.4	18.3
Under $50,000				
Gross Profit on Sales	32.0	40.3	33.2	47.3
Total Operating Expense	25.6	39.4	21.3	37.9
Net Profit (Before Taxes)	–1.4	10.5	4.5	15.1

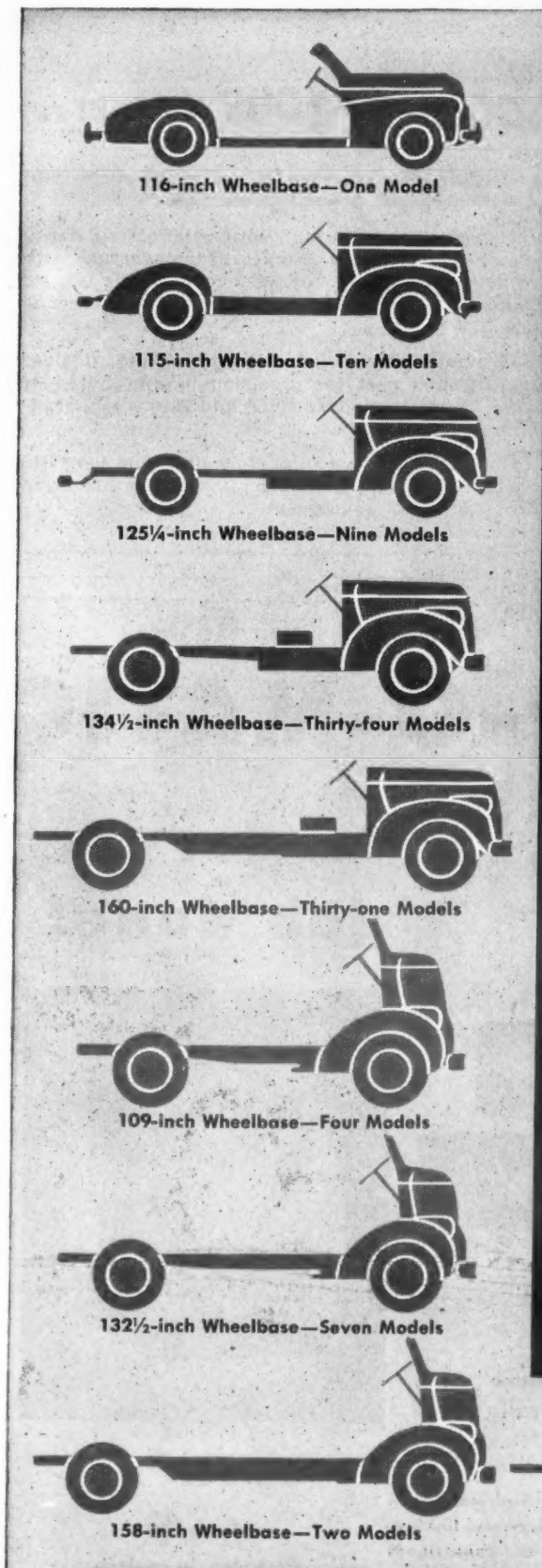
*First six months of 1945.

Table 8. Relationship Between Gross Profit And Mark-up

Gross Profit (% of Sales)	Mark-Up (% of Cost)	Gross Profit (% of Sales)	Mark-Up (% of Cost)
1.0	1.0	33.0	49.3
2.0	2.0	33.3	49.9
3.0	3.1	34.0	51.5
4.0	4.2	35.0	53.8
5.0	5.3	36.0	56.3
6.0	6.4	37.0	58.7
7.0	7.5	37.5	60.0
8.0	8.7	38.0	61.3
9.0	9.9	39.0	63.9
10.0	11.1	40.0	66.7
11.0	12.4	41.0	69.5
12.0	13.6	42.0	72.4
12.5	14.3	43.0	75.4
13.0	14.9	44.0	78.6
14.0	16.3	45.0	81.8
15.0	17.6	46.0	85.2
16.0	19.0	47.0	88.7
16.7	20.0	48.0	92.3
17.0	20.5	49.0	96.1
18.0	22.0	50.0	100.0
19.0	23.5	51.0	104.1
20.0	25.0	52.0	108.3
21.0	26.6	53.0	112.8
22.0	28.2	54.0	117.4
23.0	29.9	55.0	122.2
24.0	31.6	56.0	127.3
25.0	33.3	57.0	132.6
26.0	35.1	58.0	138.1
27.0	37.0	59.0	143.9
28.0	38.9	60.0	150.0
29.0	40.8	65.0	185.7
30.0	42.9	66.7	200.3
31.0	44.9	70.0	233.3
32.0	47.1	75.0	300.0

Chart D--Annual Sales Per Salesman 1941 For All Dealers and For Various Groups





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Refrigeration Problems
And Their Solution

By P. B. Reed

For Service and Installation Engineers

Manager, Refrigeration and Air Conditioning Division, Perfex Corp.

Typical Service Problems

Delayed Action From Moisture

A restaurant sent in a call for service saying that their reach-in refrigerator was too warm and the unit not running. When the Service Engineer got there a couple of hours later he found the job running, the evaporator frosted over, and apparently everything O.K.

HE PUTS ON THE GAUGES

Just to be sure, he put on the gauges and checked it for control settings. It was a methyl chloride job with thermostatic expansion valve and pressure control set 18 p.s.i. cut-in, 2 p.s.i. cut-out. He checked the contacts on the control, thinking that perhaps a bad contact had kept the unit off for awhile.

He ran the pressures up and down several times and the pressure control started and stopped the unit right on the proper settings each time. The charge was correct, but he went over the system carefully for leaks anyway, but he found none.

NO LOOSE CONNECTIONS

He checked the electrical system for a loose connection, such as a loose fuse, but found none. He asked if the current had been off, but found that the lights had been on during the time that the unit would not run, a period of about three hours.

Finally he gave up but when he went in to the shop that evening, he told his Supervisor about it, and asked him if he could figure out what might have happened. The Supervisor went to the service records and said:

"We put that job in new last spring and this is the first service call. The installation record shows that the control was set at 18 and 2 lbs., so it hasn't changed. Also the record shows that a dehydrator was put in the liquid line in accordance with our usual custom, so ordinarily we could assume that the system was dry and that moisture is not to blame.

MOISTURE AS THE CAUSE

"Nevertheless I think that moisture in the system is the cause of the trouble. Here's what probably happened:

"There was some moisture in the system when it was put in. The dehydrator took up most of it, but perhaps there was more moisture than a dehydrator could be expected to handle or maybe the silica-gel wasn't itself as dry as it should have been.

"You remember we had a little trouble from that cause, due we thought at the time to someone leaving the cap off the big jar of silica-gel so that it picked up quite a little moisture from the air. Anyway, there was probably some moisture left in the system.

"Yes, but why hasn't it caused trouble before now if that's true?" asked the Service Engineer. "If the moisture had been in there all this time it surely would have shown up before now."

WHY IT HAD NOT SHOWN UP BEFORE

"Maybe not," replied the Supervisor. "Remember, that is a frost-building job, and is defrosted by hand every few days by the customer. He defrosts it in the daytime by snapping the switch off for a couple of hours or so.

"He's working out of it, off and on most of the day, so, as soon as the evaporator is about all defrosted he turns it back on again. The chances are that there is still some ice left on the bottom of the evaporator every time, for it's not unusual to find that happen.

"So the moisture in the high side was caught by the dehydrator, but the moisture in the evaporator froze into little globules of ice and stayed in the evaporator. It's quite possible and even probable, I'd say, that those little globules of ice have never melted and have stayed in the evaporator all this time.

RECENT DEFROST MORE EFFECTIVE

"If you will inquire, I imagine you will find that recently he defrosted it longer than usual, or possibly the current had been off, with the result that the evaporator had been entirely warmed up above freezing, the bottom as well as the top of the evaporator. This allowed the ice globules to melt and the moisture to be released. It, therefore, circulated around through the system and, arriving at the expansion valve it froze, causing the valve needle to stick in the closed position, shutting off the refrigerant to the evaporator.

"With the expansion valve closed, the machine pumped the evaporator down and then stayed off, for there was no more methyl coming in to raise the pressure in the evaporator to the 18 lb. cut-in. The unit stayed off for a long time, two or three hours perhaps, at least long enough that the user noticed it and put in a call.

FINALLY CORRECTED ITSELF TEMPORARILY

"Finally, with no refrigeration, the evaporator and the expansion valve warmed up and the ice in the expansion valve melted and released the valve. Refrigeration was resumed and the moisture probably froze again in the evaporator and stayed there, the same as before.

"But it it not very safe. Eventually it will cause trouble again. It may go along all right for weeks or months, and then again it may do it tomorrow. Anyhow, the moisture shouldn't be in there. It causes corrosion and promotes such things as copper-plating, oil sludging, and similar disturbances, so it should be removed.

CORRECT IT NOW

"I would go out there tomorrow and replace that dehydrator with one with a fresh, dry charge of silica gel. It will be good insurance against a reoccurrence of the same thing that happened today.

"I've seen this same thing before and I belive that what I've just outlined is what happened."

Said the Service Engineer, "This is the first time I've ever run into it. I've never seen it on sulphur jobs."

WOULD NOT OCCUR ON SULPHUR OR AMMONIA JOBS

"No," replied the Supervisor, "it wouldn't happen on a sulphur dioxide job, nor an ammonia system either; for moisture doesn't exist as free moisture with either of those two refrigerants. It combines with them to form sulphurous acid in the case of the sulphur system, and aqua ammonia in the case of the ammonia system. These two chemicals go on through the expansion valve without freezing and the moisture does not freeze out of them, and form ice globules in the evaporator."

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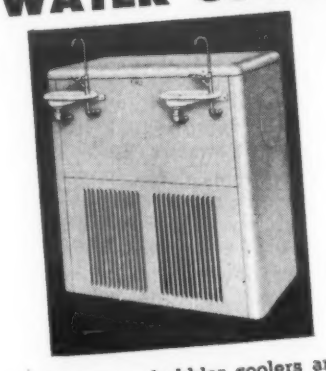

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Whiting To Make Freezer, Machines, Liner--

(Concluded from Page 1, Column 4)

materials are on hand, Mr. Roberts said. It will take from five to seven weeks to get their production line under way.

Both freezers will be in sample production in August, it is believed.

Two shifts are being planned for, and when peak production is reached, it should total between 240 and 250 freezers a day, he disclosed.

Whiting will build three compressors: A 1/6-hp. unit for the 4-cu. ft. freezer, a 1/4 for the 11, and a 1/3. The 1/3-hp. unit at first will be sold to other freezer manufacturers when production gets under way, Mr. Roberts said, but eventually it will power a larger Whiting freezer that is still in the planning stage.

Conversely, the company will use the Larkin Evapoliner system exclusively on its own production line for the time being, with sale of the rights to other manufacturers a future possibility.

Under the Larkin system, the inner shell of the freezer is revolved on a turntable, and the Evapoliner machine extrudes copper tubing around it, laying it on like toothpaste coming out of a tube, with the nozzle going up a notch with each complete revolution until it reaches the top, where the tubing is automatically pinched off and sealed.

The coils are welded on as they go, and the process saves both in time and manpower to the extent that where other manufacturers pay around $22 for a hand-applied copper tubing job, it costs Whiting less than $5 per unit, Mr. Roberts claimed.

The freezer itself will be produced along lines of maximum simplicity, he said, with efficiency the major point, and gadgets omitted.

HOWARD R. ROBERTS
Who heads up the refrigeration activities of the Whiting Corp.

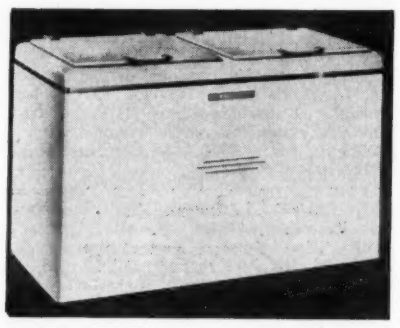
"It will not be sold as a home appliance, as a convenience in the home," Mr. Roberts emphasized, "but as a piece of equipment making frozen foods possible in the quantities that will allow:

"1. Money saving: Whiting salesmen will carry frozen food list prices showing the savings possible in bulk buying; these savings will go as high as 50%.

"2. Time saving and convenience: The number of shopping trips is cut down, and the preparation time for frozen foods is substantially less, not only the cleaning and cooking, but the absence of waste and unusable excess.

"3. Better food in your home: Because they are processed immediately after picking, frozen foods come to your table fresher and more nutritious, and more delicious, than the fresh foods you buy at your local market."

Because the home freezer should be sold as an instrument toward this picture of better living, the biggest



Whiting "double" home freezer with 11 cu. ft. capacity, retailing for $379.50.

* * *

problem *could* be its servicing and maintenance, Mr. Roberts pointed out.

An operating system thus has been worked out in this freezer that is as nearly service-proof as possible, he believes. Pressure valves have been eliminated, with a capillary system taking their place. An accumulator equalizes pressure at the top of the system.

None of the parts in the operating system are out of reach; none are buried in the insulation, he pointed out. They are found below, in the compressor chamber, easily accessible.

The compressor and condensing unit both can be easily removed by the closing of two valves and the removal of four nuts. Use of an oversize condenser eliminates the need for a fan, resulting in no vibration and no forced draft of dirt-carrying air around the kitchen.

Full-length winding of the copper tubing means no condensation problem within the freezer, he said, and cutouts in the collar eliminate condensation around the top of the unit. Both freezers are 36 in. high, allowing easy arm-length reach into the top-opening interior.

Whiting will operate through a limited number of distributors within a 400-mile-radius circle around Chicago and one small concentrated area around Washington, D. C. This 400-mile circle, however, takes in 38% of the nation's buying power, Mr. Roberts said.

This plan seemed most practical because of Chicago's centralized position as to manufacturing facilities, sources of supply and, as pointed out previously, potential market.

Because Whiting sees the home freezer as a specialty item, an intense educational program will be necessary, Mr. Roberts said. Each dealer, for instance, will first be given one new freezer not to use as a floor demonstrator, but to install in his own home, and use there for his own family.

A few months' actual use will do more to sell *him* on it, the company believes, than any amount of literature and sales training alone could do. After that, he will be ready for sales training on a sound basis.

Whiting Corp. itself is not a new organization. It was organized in 1884 as a company manufacturing overhead cranes, and since then has grown into many branches producing for a wide variety of industries—aviation, railroads, metal and chemical processing, and the handling equipment they use. The company is new to refrigeration, however. Its nearest approach was the production of Whiting stokers, begun in 1939.

Whiting has an unusual labor relations record. Under a plan which divides all profits 50-50 between labor and management, and with 25% of the company's half going into a pension fund for its employes, there **has never seemed any necessity for union activity.**

1947 Heating & Ventilating Exposition Near a 'Sellout'

NEW YORK CITY—Reservations for the Seventh International Heating and Ventilating Exposition to be held Jan. 27 to 31, 1947 in Cleveland, have now reached about 90% of the available capacity, the exposition management reports.

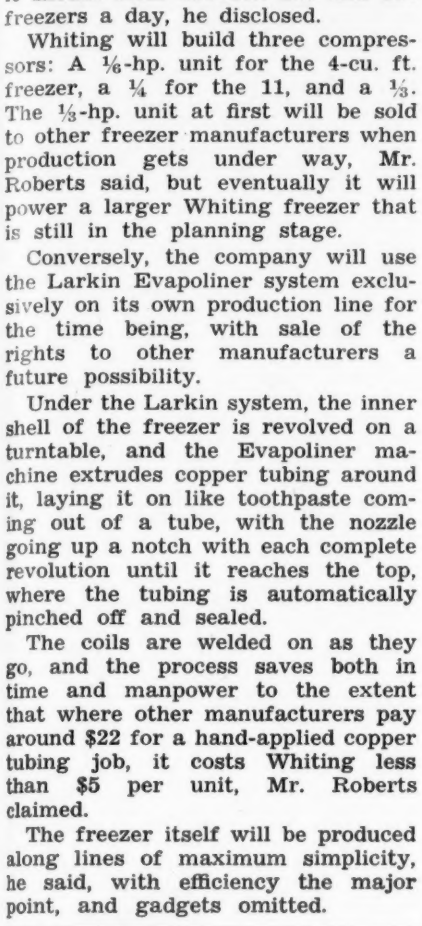
The Heating and Ventilating Exposition will occupy the entire floor of the Lakeside Hall in Cleveland, comprising approximately 20,000 sq. ft. of space.

The exposition dates correspond with those of the fifty-third annual meeting of the American Society of Heating and Ventilating Engineers, which is sponsoring the show. The National Warm Air and Air Conditioning Association also meets there.

General arrangements for the Heating and Ventilating Exposition are being made by the International Exposition Co., of New York, which has organized and conducted previous heating and ventilating expositions. Charles F. Roth is manager of the exposition and E. K. Stevens, associate manager.

Announcement has been made of appointments to the Advisory Committee of the exposition, which is under the chairmanship of Alfred J. Offner, president of the American Society of Heating and Ventilating Engineers. B. M. Woods, first vice president of the Society, is vice chairman of the committee, which now includes the following A.S.H.V.E. representatives:

L. P. Saunders, chairman, committee on research; H. R. Allonier, president, Central Ohio Chapter, Columbus; Herman Seelbach, Jr., president, Western New York Chapter, Buffalo; A. W. Edwards, president, Cincinnati Chapter, Cincinnati; F. R. Bishop, president, Michigan Chapter, Detroit.



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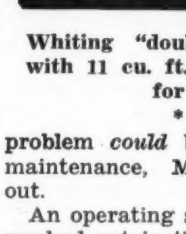

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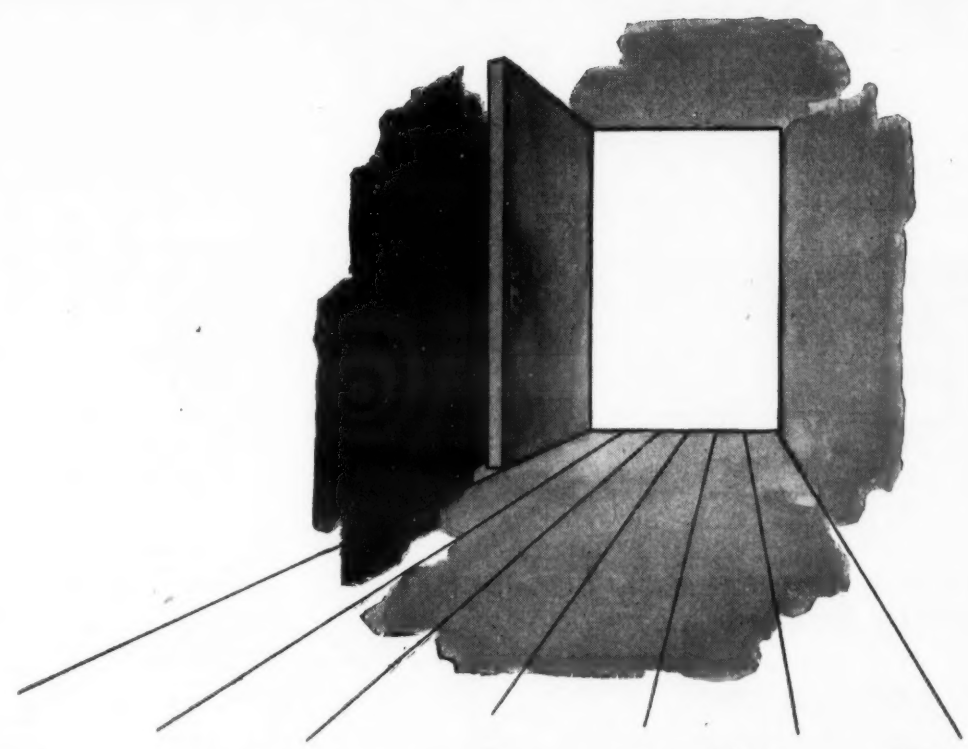

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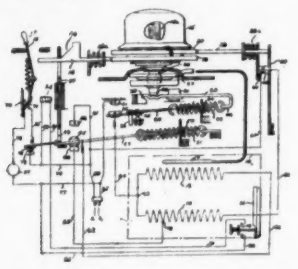
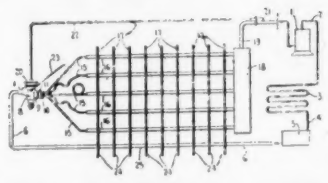
Week of June 25

2,402,787. DOMESTIC APPLIANCE. Carl A. Stickel, Dayton, Ohio, assignor to General Motors Corp., Dayton, Ohio, a corporation of Delaware. Application Nov. 20, 1940, Serial No. 366,449. 14 Claims. (Cl. 219—20.)



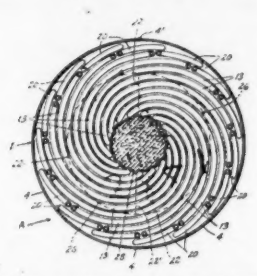
1. In combination, an oven, electric heating means for said oven, a source of electrical power, selector switch means settable in preheat and cooking positions respectively connecting said source of electrical power to energize said electric heating means in a preheat circuit with relatively high wattage and in a cooking circuit with a relatively reduced wattage, thermostatic means responsive to oven temperatures modifying the connection of said source of power with said heating means when said temperatures are below and above selected values respectively, a signalling device, means responsive to the setting of said selector switch means in preheat position and the modifying of the connection of said power source with said heating means by said thermostatic means for rendering said signalling device effective and thereafter to remain effective independently of said thermostatic means, and means independent of said thermostat to render said signalling device ineffective after being rendered effective by said thermostat, said last named means being automatically reset when said selector switch means is reset to preheat position.

2,402,802. REFRIGERATING APPARATUS. Franklyn Y. Carter, Detroit, Mich., assignor to Detroit Lubricator Co., Detroit, Mich., a corporation of Michigan. Application Feb. 17, 1944, Serial No. 522,741. 1 Claim. (Cl. 62—8.)



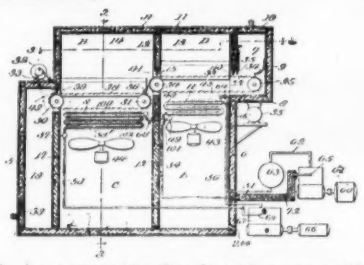
A refrigerating apparatus comprising a multi-pass evaporator, a refrigerant medium distributing member having a chamber and a plurality of restricted outlet passageways leading therefrom, a plurality of distributing conduit members for connecting the passageways to the evaporator passes and connected one to each of said passageways and passes, an expansion valve controlling the supply of refrigerant medium to said distributing member chamber, said outlet passageways being so restricted as to create in said chamber a predetermined refrigerant medium pressure, a liquid refrigerant medium conduit spaced from said evaporator passes and leading to the inlet of said expansion valve, and a plurality of heat exchange fins projecting from said liquid conduit and having apertures tightly receiving said evaporator passes so as to cool the refrigerant medium to be supplied to said chamber to a temperature such that the refrigerant medium will not vaporize at the predetermined pressure in said chamber.

2,402,881. HEAT EXCHANGER. Arthur J. Pausek and Irwing F. Pausek, Clayton, Mo. Application Jan. 2, 1943, Serial No. 471,130. 6 Claims. (Cl. 257—220.)



1. A heat exchanger comprising a housing having inlet and outlet means for passage of a medium into, through, and out of said housing, a pair of spaced apart manifolds disposed within said housing and provided respectively with inlet and outlet means, a plurality of pipes arranged within said housing and connected at their opposite ends into said manifolds for passage through the manifolds and pipes of a second medium, a second pair of spaced apart manifolds disposed within said housing and provided respectively with inlet and outlet means, and a plurality of pipes arranged within said housing and connected at their opposite ends into said second pair of manifolds for passage through the second pair of manifolds and the pipes connected thereto of a third medium, each of the pipes connected to the first-mentioned pair of manifolds and each of the pipes connected to the second-mentioned pair of manifolds being provided with return bends and connecting portions between said return bends which give to the pipe a tortuous formation in the direction of the length of the pipe and said tortuous portion of the pipe being curved transversely of the pipe, said pipes connected to the first-mentioned manifolds and said pipes connected to the second-mentioned manifolds being arranged within the housing in a closely nested condition.

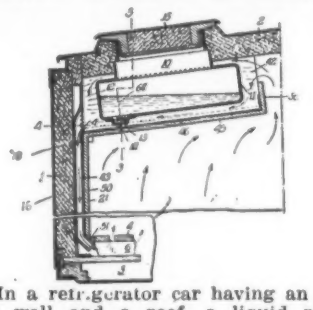
2,402,921. APPARATUS FOR FREEZING COMESTIBLES. Norman Sharpe, San Luis Obispo, Calif. Application Aug. 18, 1942, Serial No. 455,229. 12 Claims. (Cl. 62—102.)



1. An apparatus for freezing comestibles or the like comprising, a pair of substantially closed chambers, means for circulating an individual air stream in each of said chambers, a mechanical refrigerating system for cooling each of said chambers and the circulating air streams therein, a conveyor extending across one chamber and the path followed by air circulating therein and discharging into the other and second chamber, a conveyor in said second chamber for receiving the discharge from said first named conveyor, the conveyor of said second chamber extending across the chamber and the path followed by air circulating therein and discharging at a point exterior of said second chamber, the refrigerating system of the first chamber being operable to chill the air stream therein to a temperature which will cool the comestibles to a temperature above but closely adjacent to their freezing point, the refrigerating system of the second chamber being operable to chill the air stream therein to a temperature below the freezing point of the comestibles, means to feed the comestibles to the conveyor of the first chamber, each of said refrigerating systems including a refrigerating evaporator coil and a condenser coil, and the evaporator coil of that system serving the less cold chamber being combined in heat exchange relationship with the condenser coil of that system serving the colder chamber.

Week of July 2

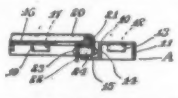
2,402,980. RAILWAY REFRIGERATOR CAR STRUCTURE. Edwin R. Battley and George E. McCoy, Montreal, Quebec, Canada. Application Jan. 26, 1945, Serial No. 574,791. 14 Claims. (Cl. 62—17.)



1. In a refrigerator car having an insulated wall and a roof, a liquid refrigerant container adjacent said roof and said wall, a partition spaced below said container forming an air cooling chamber therebetween, said container having apertures to provide for the escape of liquid from said container, a plurality of vertically disposed flues associated with said wall communicating with said air cooling chamber, and means to confine liquid from said container within a portion only of said air cooling chamber and conduct it into certain of said flues only.

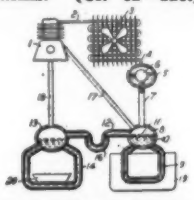
2,403,164. REFRIGERATOR SHELF. Robert S. Ahrens and Walter A. Ellsworth, St. Paul, Minn., assignors to Seeger Refrigerator Co., St. Paul, Minn., a corporation of Minnesota. Application June 15, 1944, Serial No. 540,463. 2 Claims. (Cl. 211—135.)

1. A refrigerator shelf comprising a shelf body, a circular aperture therein, a flange on said shelf body projecting into said aperture, a round rotatable shelf portion, a downwardly extending flange means on said rotatable shelf portion at the periphery thereof, downwardly projecting ears on said shelf portion adjacent the flange means, and roller means



rotatably supported between said ears and said flange means, said roller means resting upon said inwardly extending flange.

2,403,220. REFRIGERATING APPARATUS OF THE COMPRESSION TYPE. Rudolf Hintze, Berlin-Charlottenburg, Germany; vested in the Alien Property Custodian. Application Feb. 26, 1941, Serial No. 380,596. In Germany Jan. 12, 1940. 8 Claims. (Cl. 62—116.)



7. A cabinet refrigerator provided with a refrigerating apparatus of the compressor type, having a refrigerant circulating system containing two separable refrigerants, one having a higher specific gravity and boiling point than the other the latter being adapted to float on the former, comprising a compressor, a condensing means for condensing said refrigerants to obtain a liquid mixture thereof, two evaporators, at least the first one of which is provided with a header, a conduit including a control means connecting said condensing means to the header of said first evaporator, an overflow conduit connecting the header of said first evaporator with the second of said evaporators, said header acting as a separating means for separating the said refrigerants and supplying the heavier one to the first evaporator and the lighter one to the second, the second of said evaporators being designed for making ice and encompassed within the first.

(To Be Continued)

The New

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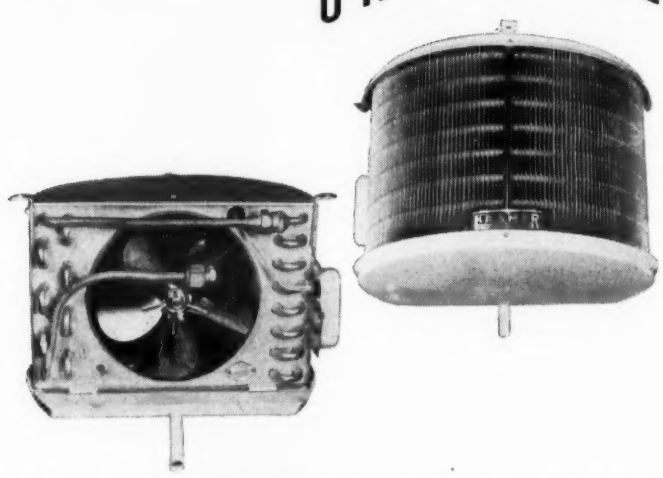

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MANUFACTURER'S AGENT: Maryland, District of of Columbia territory desires lines commercial refrigeration equipment and supplies. Fifteen years sales experience; aggressive, top producer. Can arrange local warehousing in short time. Baltimore headquarters. Reply Box 2041, Air Conditioning & Refrigeration News.

POSITIONS AVAILABLE

One of the MOST PROGRESSIVE and fastest growing organizations in the industry wants commercial refrigeration service-installation men of such high qualifications that they will justify journeymen's pay plus. The industry's finest working conditions. Include complete personal data in first letter. TUDOR-PERFECOLD, INC., 1940 S. Main St., Los Angeles 7, Calif.

SALES ENGINEER: For eastern air conditioning and commercial refrigeration dealer carrying nationally known lines. Must be familiar with duct layout and complete engineering of air conditioning and commercial refrigeration jobs up to 20 hp. Leads furnished and assistance given. Go getter can earn $8,000 and up per year. Box 2031, Air Conditioning & Refrigeration News.

INSPECTOR—thoroughly acquainted with machine shop practices and experienced on inspection of precision machined parts. Must be reliable and have dominant personality. Openings in Detroit, Lima, Ohio, and Elkhart, Ind. Salary open. Future prospects excellent for right man. Complete personal information and experience records necessary before interview. Box 2038, Air Conditioning & Refrigeration News.

POSITION AVAILABLE: Excellent opportunity for experienced service man in Northwestern Michigan. Work with commercial refrigeration dealer covering large territory. Must be able to install and service locker plants, also all other commercial installations. Will turn service department over to right man. Permanent position. Write Box 2040, Air Conditioning & Refrigeration News.

SALES MANAGER, Commercial Refrigeration to take complete charge of Sales Department in city in Southern Massachusetts, 50 miles from Boston. Must have thorough knowledge of refrigeration. Permanent position with good salary to right man. Box 2044, Air Conditioning & Refrigeration News.

DOWNSTATE ILLINOIS Frigidaire dealer wants service man to take charge of medium size service department. Must know commercial refrigeration and air conditioning service and installation and must not be afraid to work. State salary expected to start. Will also pay commission on sales to right man. Box 2045, Air Conditioning & Refrigeration News.

EQUIPMENT FOR SALE

FOR SALE: 16 and 21-cu. ft. Frozen Food cabinets with sliding glass doors or solid lids. Remote or self-contained. Stainless steel, modern design top, all steel construction, 5 in. insulation. Dealerships open. Immediate delivery. Units installed when available. COLDIN CABINET CO., INC., 1342 Webster Ave., Bronx, N. Y.

FOR SALE: 10,000 new aluminum ice cube trays in three popular sizes. Also air-cooled and water-cooled remanufactured condensing units ¼ up to 2 hp. Write for particulars. EDISON COOLING CORP., 310 E. 149th St., Bronx 51, N. Y.

FROSTEDAIRE Refrigerated Cabinets 10 cu. ft. for commercial food and ice cream storage, suitable domestic use. Sliding glass top or 6 rubber lids, stainless steel rounded top, 18 gauge steel construction, 5" proven insulation, hermetically sealed hull, "Freon-12" refrigerant. Now available. FROSTEDAIRE CORP., 801 Greenwich St., New York 14, N. Y. CHelsea 3-4900.

DRY BEVERAGE COOLERS, open type frosted food cases, glass top freezers, stainless steel reach-in refrigerators. Immediate delivery; attractive distributorships available. GENERAL REFRIGERATORS CORP., 678 Broadway, New York 12, N. Y., ST 9-1222.

SEALED CROSLEY TERMINALS. Installed from the outside in a few minutes without opening the compressor. Corrects leaky terminals on all Crosley "F-12" units. Set of three $6.75 (Part No. 1020). Installation tool $1.65. Immediate delivery. Money-back guarantee. SEALED UNIT PARTS CO., 3097 Third Ave., New York 56, N. Y.

FRIGIDAIRE METER-MISER Terminals. Installed from the inside. Fits compressors with bottom-mounted terminals. (Part No. 1060.) Set of three $2.85. WESTINGHOUSE TERMINALS. Installed from the inside. (Part No. 1030.) Set of three $2.85. SEALED UNIT PARTS CO., 3097 Third Ave., New York 56, N. Y.

NORGE CHECK VALVES. For open-type units. (Part No. 1040). $2.55 each. SEALED NORGE terminal packing washers. For repairing leaky terminals. Installed from the outside in a few minutes. (Part No. 1050). Three sets (9 washers) $1.00. SEALED UNIT PARTS CO., 3097 Third Ave., New York 56, N. Y.

COLDSPOT and BOHM Check Valve Sets. Same as original equipment. Easy to install. Will fit all Coldspot and Bohm open type units. No grinding of the seat necessary. New seat included. Set consists of six parts, $3.25 per set. SPINELLO ENGINE CO., 99 Woodland Ave., Kearny, N. J.

Manufacturers of ESKIMO FREEZERS. Immediate delivery. Ice cream cabinets—4, 6, 8, 10, 12 hole. Farm freezers—12, 16, 21 cu. ft. Also sliding glass door cabinets equipped with compressor unit less motor. WILSON FREEZERS, INC., 837 Tilden St., Bronx, N. Y.

100 NEW Kold-Hold plate coils, size 18 x 33"—surplus stock. $9.50 each. F. O. B. Portland, Ore. Box 2043, Air Conditioning & Refrigeration News.

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WANTED: NEW 5, 7½, 10, and 15 hp. Condensing Units or Compressors, regardless of make. Please give full particulars when writing to: E. GEIGER, 1381 Springfield Ave., Irvington, N. J.

FRANCHISES WANTED

WANTED—DISTRIBUTORSHIP or agency on sales and service of package-type Air Conditioners, Water Coolers, and Refrigeration Specialties by company established 17 years in Chicago territory. Write TRUMBULL REFRIGERATION SERVICE, 2915 West Madison St., Chicago, 12, Ill.

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ATTENTION MANUFACTURERS: Have bona fide order for 200 or more combination high and low temperature Upright Frozen Food boxes for Pacific coast area. Need reliable manufacturer to handle this order—unlimited possibilities for future business if proper connection can be established. Contact me at once. Box 2042, Air Conditioning & Refrigeration News.

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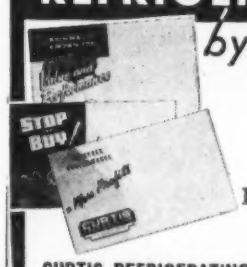

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Bulletins C-14-M, C-58, C-68-C

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What's New

* * *

Barlow & Seelig To Have Automatic Washer Soon

RIPON, Wis. — Production of a new, automatic washing machine which washes, rinses, and damp-dries in one continuous automatic cycle, will begin in October, Barlow & Seelig Mfg. Co., manufacturer of Speed Queen washers and ironers, announces.

Based on present day costs, the Speed Queen automatic washer will retail for $169 in zone 1, according to P. J. Daniels, director of sales.

Providing no production hitches interfere, a pilot run is scheduled for October. First models will roll off the line in November and distributors should receive shipments by the end of the year, it is said.

The Speed Queen automatic washer employs a new principle of water action, claims Horace Bumby, president of Barlow & Seelig. A full load of clothes is turbulently oscillated 144 times a minute, continuously submerged in the wash water, he says.

The basic principle of the hydraulic brake is used to remove the soap and damp-dry the clothes, thus eliminating any need for wringers or spinners, he declares. The rinsing operation is so thorough, Mr. Bumby claims, that the last rinse water comes out crystal clear.

Having only 30 moving parts, the machine requires no bolting down and is absolutely vibrationless, he asserts. It is said that the machine is capable of balancing a coin on edge during operation.

The washer can be used, fully automatic, in homes that have no hot water heaters, Mr. Bumby stated. It requires only 10 gallons of hot water for a full load of clothes, it is said.

According to a company bulletin, the Speed Queen automatic completes a washing cycle in 23 to 29 minutes, depending on the load.

York Designs 2 Postwar Frozen Food Cabinets

YORK, Pa.—Two models of frozen food cabinets designed for both storage and quick freezing were announced recently by York Corp. through John R. Hertzler, vice president and general sales manager, as its first entirely new postwar units.

The larger of the two, Model 350, is an upright, locker-type unit with front-opening doors and has a total capacity of 32⅝ cu. ft. Model 165, a well-type cabinet, has a total capacity of 16½ cu. ft.

Model 350 is intended for suburban and rural homes and to supplement storage in hotels, restaurants, hospitals, clubs, and commercial establishments. Its freezer compartment capacity is 8⅓ cu. ft., while storage space is divided between three drawers totaling 9½ cu. ft. and three shelves totaling 15 cu. ft.

Model 165 was designed for use in rural and urban homes and smaller commercial establishments. Capacity of the freezer section is 3 cu. ft.

According to York officials, Model 350 will hold up to 1,300 lbs. of frozen food and Model 165 up to 600 lbs.

The condensing unit and controls of Model 350 are on top. A ½-hp. motor handles the entire refrigeration load on this cabinet, which is just under 6 ft. high, slightly more than 5 ft. wide, and 34 in. deep.

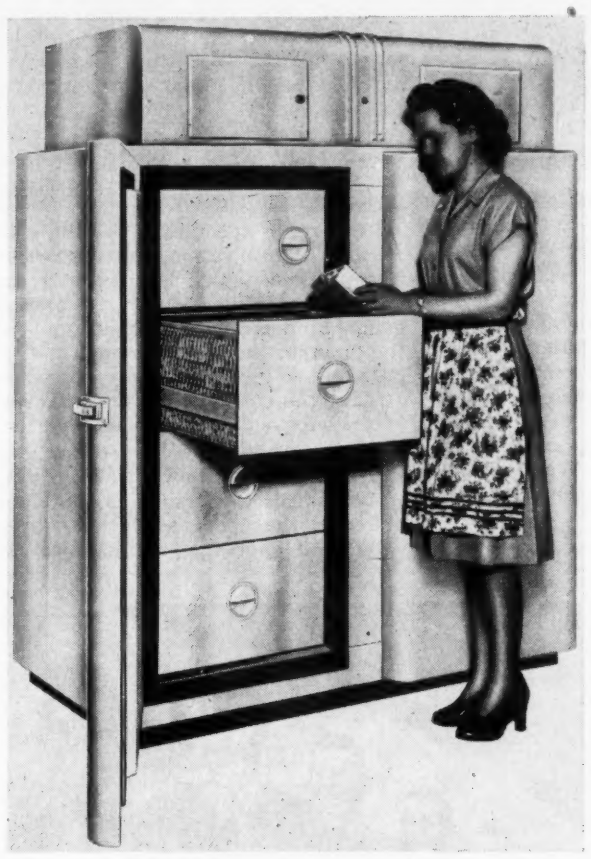
A warning bell rings when the storage temperature goes above the recommended range, and a pilot light burns continuously as long as the power supply is not broken.

Model 165's ⅓-hp. condensing unit, it is claimed, can be pulled forward for maintenance upon removal of the machine compartment panel. This model is said to have two "extra large" access lids and movable partitions in the storage compartment for convenience in stacking packages.

Dimensions of Model 165 are given as 6 ft. in length, 3 ft. in height, and 29 in. in depth.

Evaporators of both models are of aluminum tubing bonded to the interior liner plus a refrigerated freezer shelf. Both units are described as having exterior casings of baked white enamel on bonderized steel and interiors of matte-finished aluminum.

Model 165 has 3 in. of insulation at the top and 4 in. on the walls and bottom. All insulation in Model 350 is 4 in.



At left a demonstrator is shown using York Corp.'s new postwar upright frozen food cabinet, Model 350. This model, which combines both storage and quick freezing, has an 8⅓-cu. ft. top drawer freezer compartment and three lower drawers, that have a total storage capacity of 9½ cu. ft. in addition to three shelves totaling 15 cu. ft. Model 350, powered by a ½-hp. motor, is capable of holding 1,300 lbs. of food and is intended for rural homes or to supplement commercial installations.

Co-Z-Air Radiator Uses New Dual Heat Principle

DETROIT—An entirely new principle of dual heating is employed in the recently announced CO-Z-AIR line of electric radiators, according to Henry J. Morton Associates, Inc., manufacturers.

CO-Z-AIR radiators use no water or other liquids and give off both radiated and convected heat. The ratio of convected to radiated heat is proportioned to the rate of evaporation of moisture from the human body.

Radiator fins are open all around, so heated air rises from both inside and out, thereby drawing cold air off the floor, the statement adds.

The CO-Z-AIR line includes five and eight-section plug-in type models at 115 volts, and a 12-section wired-in model at 220 volts.

Nykelkrom heating elements are used, the manufacturer said. In the five-section model, the element is rated at 800 watts; in the eight-section model at 1,200 watts; and in the 12-section model at 2,400 watts.

These electric radiators are designed for heating all rooms and places where permanent heating facilities are not available.

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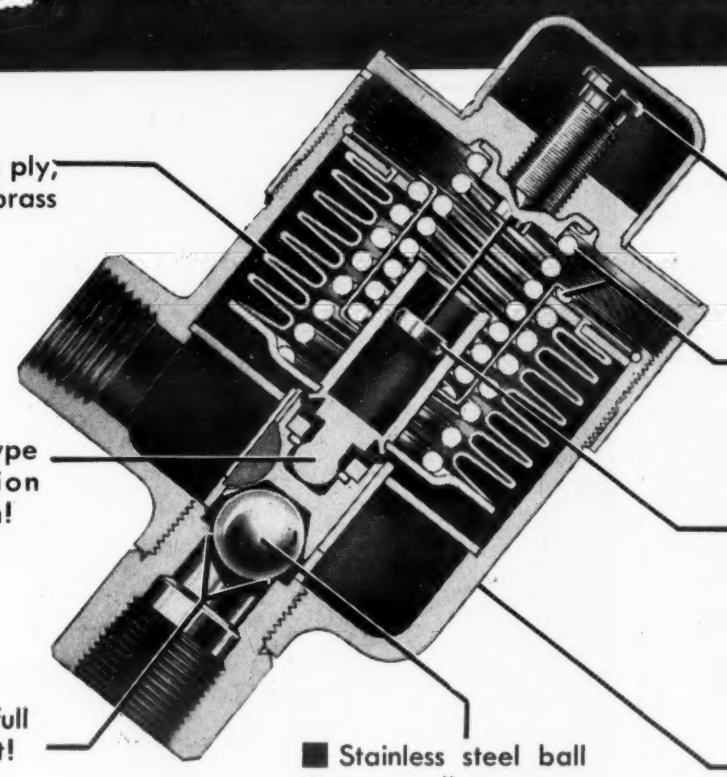

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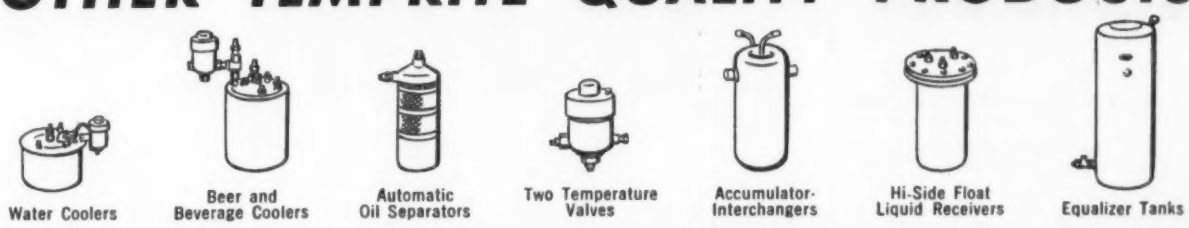

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43 PIQUETTE AVENUE DETROIT 2, MICHIGAN

Seek Better Break For Locker Plants--

(Concluded from Page 1, Column 2)

In a brief submitted to CPA Chief John D. Small on behalf of the groups, R. R. Farquhar, executive director of the FFLMSA, called attention to widely varying interpretations of the housing order as its affects locker plants. He said the industry requested the reclassification and other changes "to the end that a more intelligent, workable, and uniform program . . . may be developed."

Mr. Farquhar told CPA the associations "are convinced that the majority of locker plant applications may be approved without harm to the veterans' housing program."

He also informed the agency that although the groups oppose new projects in cities at present, they believe the construction of additional locker facilities in hundreds of small communities "will in no way interfere with the construction of new homes; will provide employment for men in the construction field and numerous jobs for veterans when the plants are opened."

CPA was asked to consider these proposals:

"1. A reclassification of frozen food locker plants from Section 2-d-iii (buildings used primarily for offices, banks, stores, etc.) to Section 2-d-vi (plants used for 'manufacturing, *processing,* or assembling of any goods or materials," etc.

"It is our belief that the functions of a frozen food locker plant . . . logically entitle (it) to be considered as a 'processing' plant as presently defined under Section 2-d-vi. If locker plants are so reclassified, it is our judgment, based on previous experience, that fully 90% of all locker plant projects would come under such classification.

"2. With those applications costing more than $15,000, there should be submitted (a) a statement from the County Agent relative to the essentiality of the project; (b) a complete statement from the applicant of the construction materials required for the project; and (c) a statement from local material suppliers that the necessary building materials are on hand and not required for housing projects carrying a priority rating."

In the event the request is denied, the groups suggested that "on submission of the evidence outlined under Section 2 above, district CPA offices be instructed to approve locker plant applications when the construction cost amounts to from $1,000 to $15,000; and that in those cases where such cost amounts to more than $15,000, determination be left to the local district offices, as at present, with the right of appeal as presently provided."

Mr. Small was informed that the Frozen Food Locker Manufacturers and Suppliers Association represented nearly 200 of the nation's leading manufacturers and builders of locker plants and equipment, and that the National Frozen Food Locker Association represented more than 2,000 of the country's 7,500 locker plants.

After meeting several times with one of the top CPA officials, Mr. Farquhar told FFLMSA members he was "hopeful" of definite action shortly. He said the associations were promised the full support of Secretary of Commerce Wallace and the Commerce Department's Small Business Committee.

While emphasizing that the locker industry " would not for a moment suggest any change which would hamper the construction of veterans' housing," Mr. Farquhar pointed out in the brief that "a careful study of reports received from many points reveals that the 71 offices of CPA vary widely in their interpretation of the housing order and its underlying purposes."

"We refer specifically to the processing, conservation, and preservation of food, which is so vitally important to the nation, but which is being hindered and discouraged by the manner in which many district CPA offices are treating applications . . . for the construction or expansion of frozen food locker plants.

"A careful study of VHP-1, and supplementary directives requesting a two-thirds reduction in building, indicates that because of the world-wide food shortage, applications for the construction of buildings and plants which would encourage food production and food preservation were to be given favorable consideration. In many district offices, however, these instructions have not been carried out."

CPA's attention was called to the fact that many of those who now desire to engage in the locker business are veterans. World War II veterans constituted 90% of the 132 students enrolled in the two locker schools sponsored by the associations.

"More than a third of these veterans have indicated their desire to own their own plants," the brief argued, "yet many of them have found it impossible to do so because their applications have been denied by district CPA offices. In still other existing locker plants, the employment of veterans has been made impossible because permission has been refused to expand inadequate plants.

"From past experience, it is safe to assume that approximately 80% of all locker plants will be located in existing buildings or in small extensions . . .," the brief declared. "The alteration of such buildings . . . requires a relatively small amount of critical materials. . . .

"Many small communities where the great majority of locker plants are desired, have supplies of these materials on hand which are not required for veterans' housing. In the cities, where the need and demand for housing are greatest, and where building materials are in short supply, we believe the construction of locker plants should presently be deferred.

"The average new locker plant today contains a little more than 500 lockers. Such a plant has a capacity for processing, and an annual turnover of, 250,000 lbs. of food."

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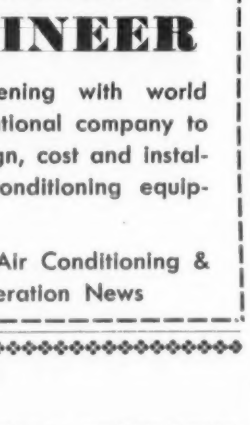
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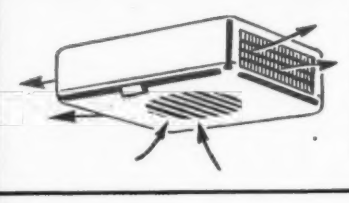
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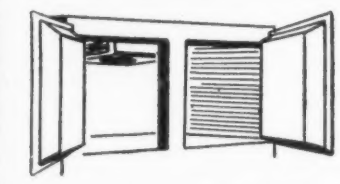
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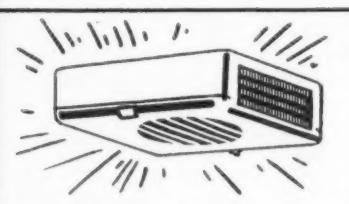
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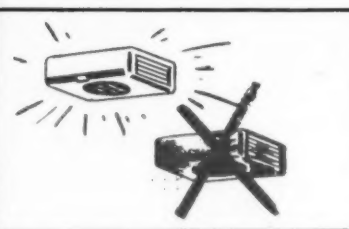
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